

Good Jobs,  
Slow Food,  
Short Commutes,  
Real Vitality...

***Creating The West's Future***

**Richard J. Jackson, MD, MPH**

**State Public Health Officer**

**California Department of Health Services**

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American Journal of  
**PUBLIC  
HEALTH**

September 2003

Walking, Bicycling, and Urban Landscapes | Urban Form, Health, and the  
Law's Limits | Smart Growth | Success in Promoting Safe Walking and Biking  
to School | A Research Agenda for Community Design, Land Use, and Health |  
**BUILT ENVIRONMENT AND HEALTH** | Does Urban Sprawl Increase Motor Vehicle  
Occupant and Pedestrian Deaths? | Linking Housing and Health in Europe



**AJPH**

**Built Environment  
and Health**

**September, 2003**

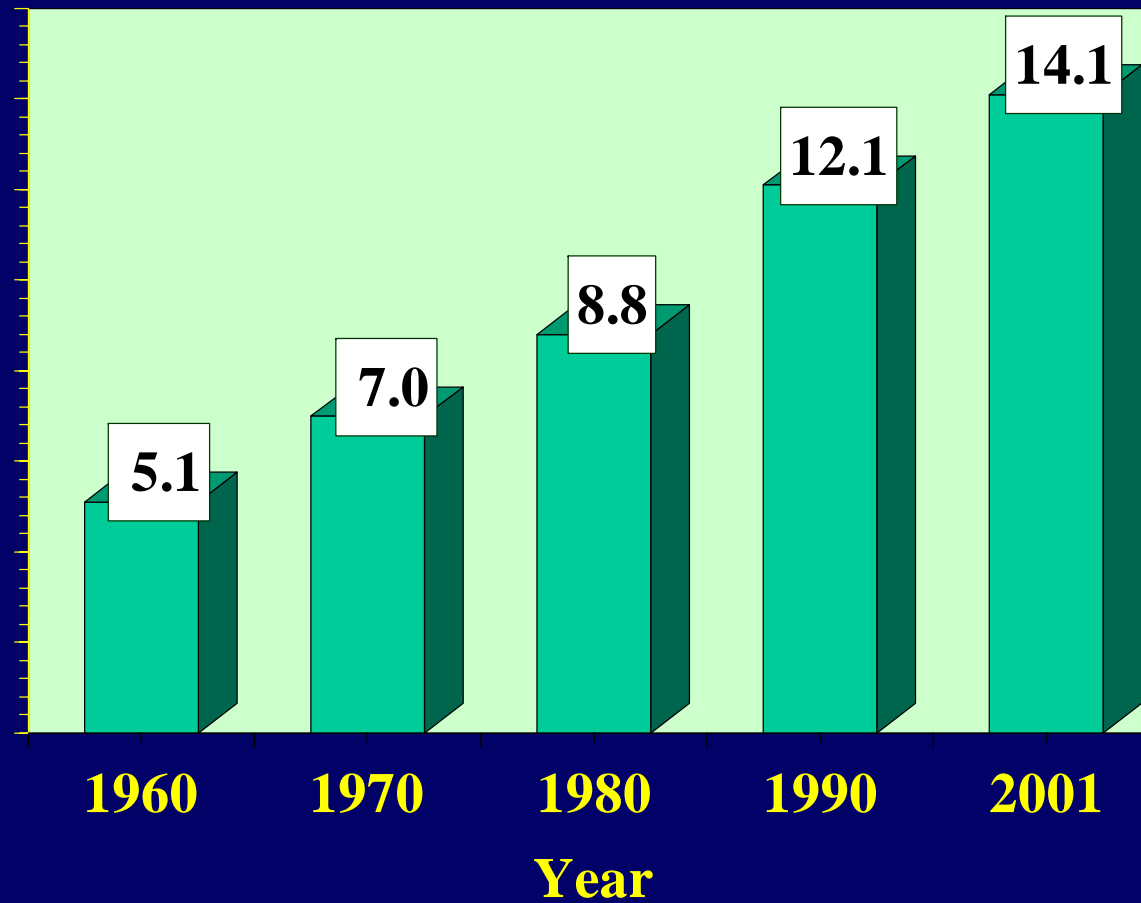


# Urban Sprawl and Public Health

DESIGNING, PLANNING, AND BUILDING  
FOR HEALTHY COMMUNITIES

Howard Frumkin,  
Lawrence Frank  
and Richard Jackson

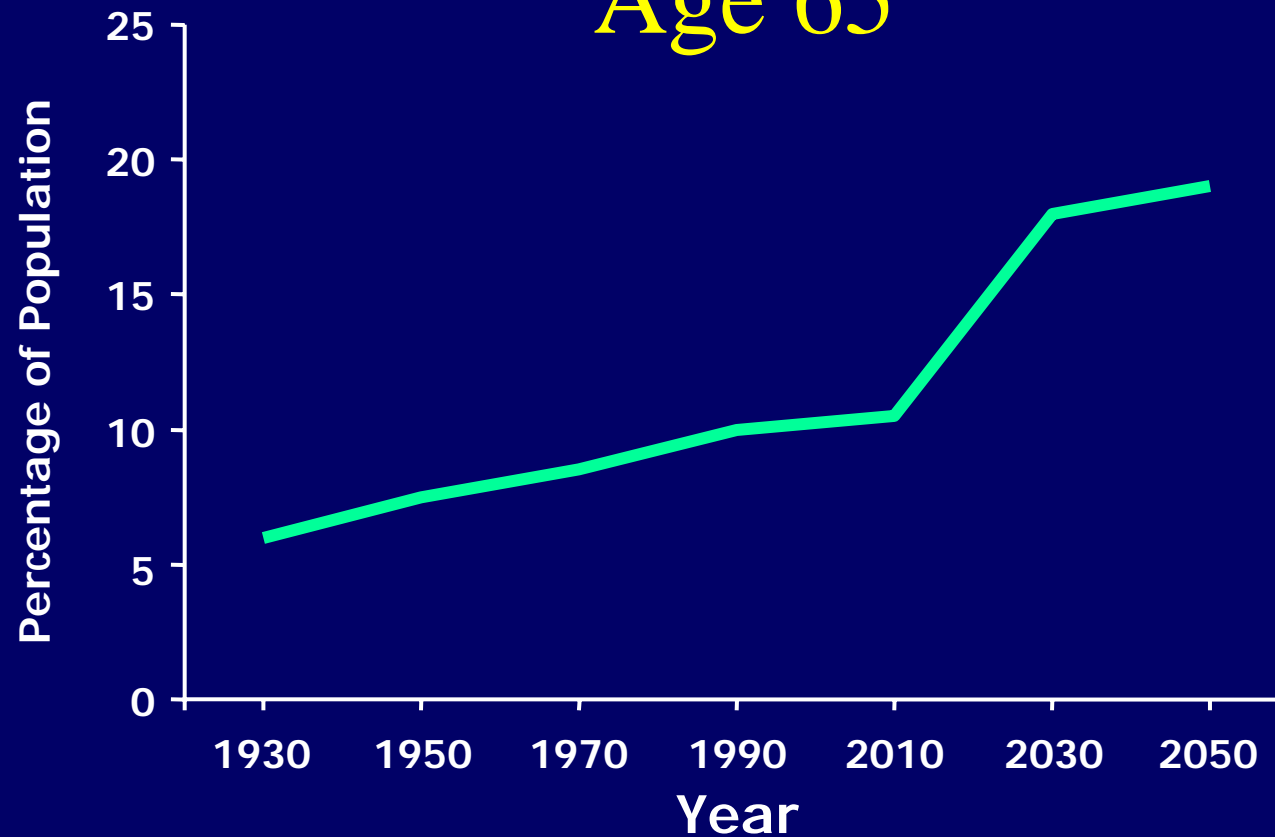
# US Health Care Expenditures as Percent of GDP 1960 to Present



**\$1.4  
Trillion  
out of  
\$10.08  
Trillion  
GDP in  
2001**

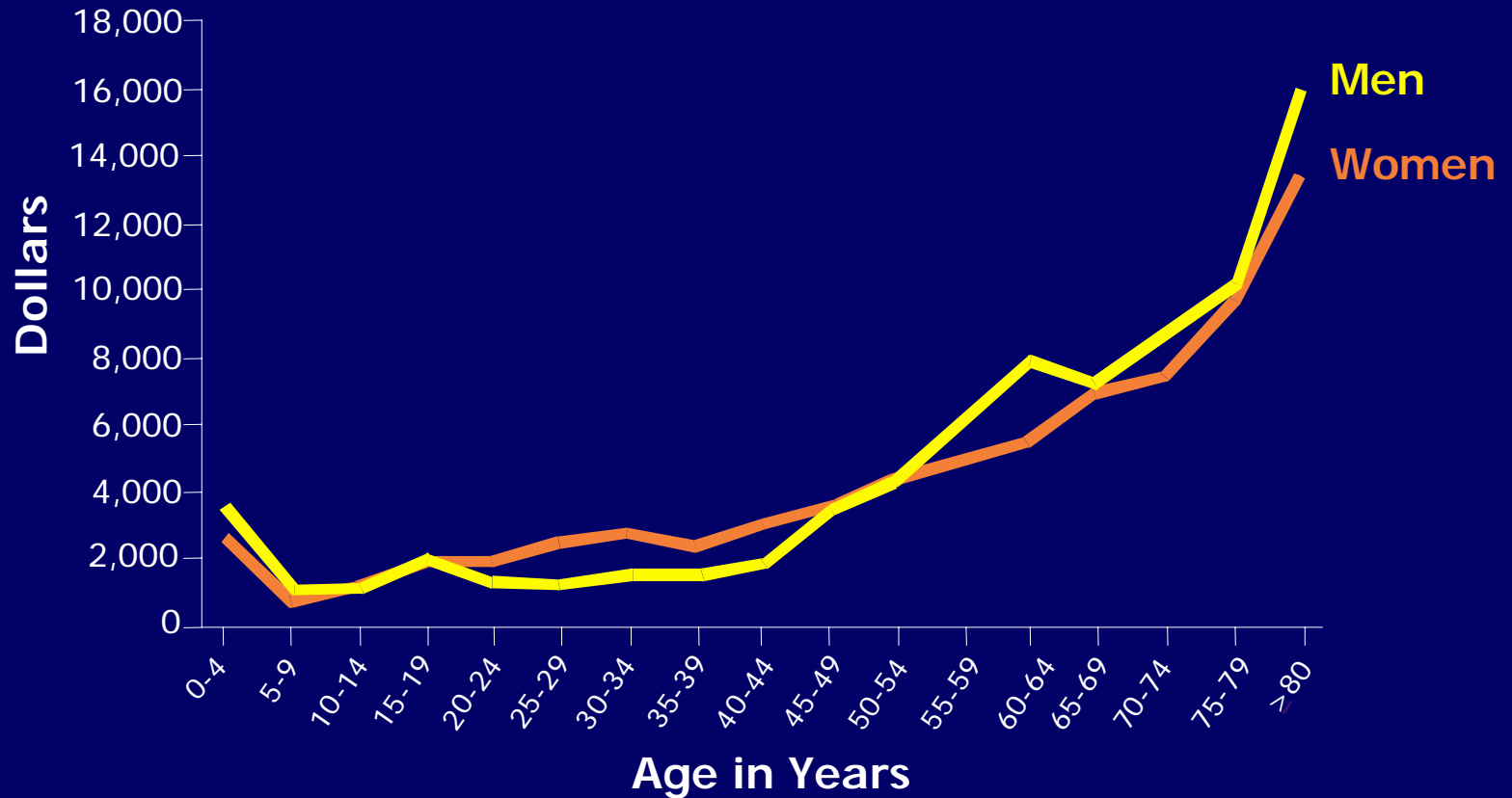
# An Aging Population

## Percentage of U.S. Population over Age 65



Source: From Baby Boom to Elder Boom: Providing Health Care for an Aging Population  
Copyright 1996, Watson Wyatt Worldwide.

# Estimated Per Capita Health Expenditures by Age and Sex, 1995



Source: From Baby Boom to Elder Boom: Providing Health Care for an Aging Population  
Copyright 1996, Watson Wyatt Worldwide.

# Disease in the 21<sup>st</sup> Century

- Diseases and costs of care for Aging Populations.
- Overweight: Diabetes II, Heart Disease
- Mental Disorders: Depression, Anxiety, Developmental, Substance Abuse
- Macro-environment: Climate, Conflict



**July 6, 1999**





## I Believe:

- The Greatest Threat to Americans' Health is
- How We Manage Our Wealth
- Supersizing and the Quality of American Life

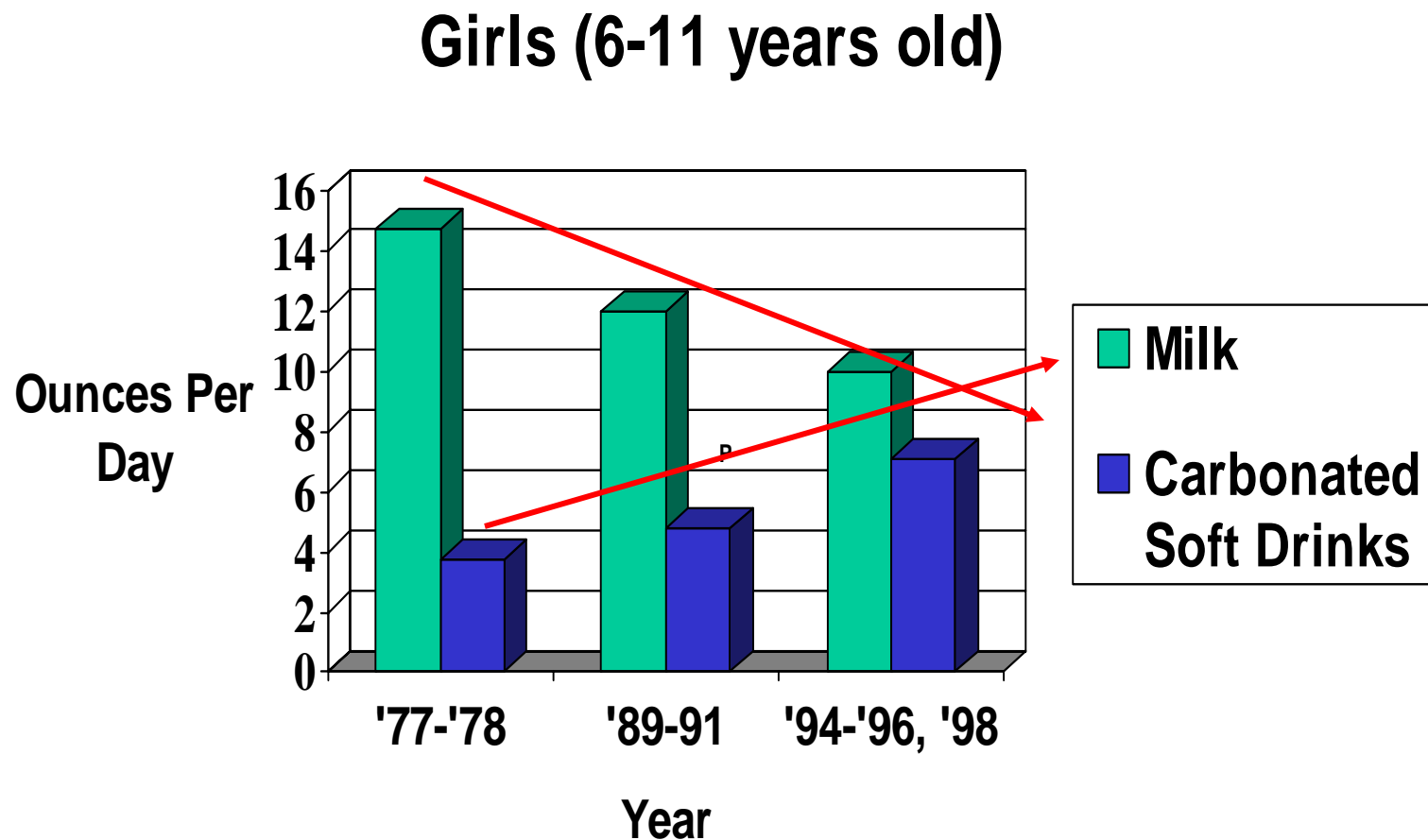
# Supersizing of the Food We Eat



**Hardee's introduces  
new  
Mega-Calorie  
“Monster  
Thickburger”**

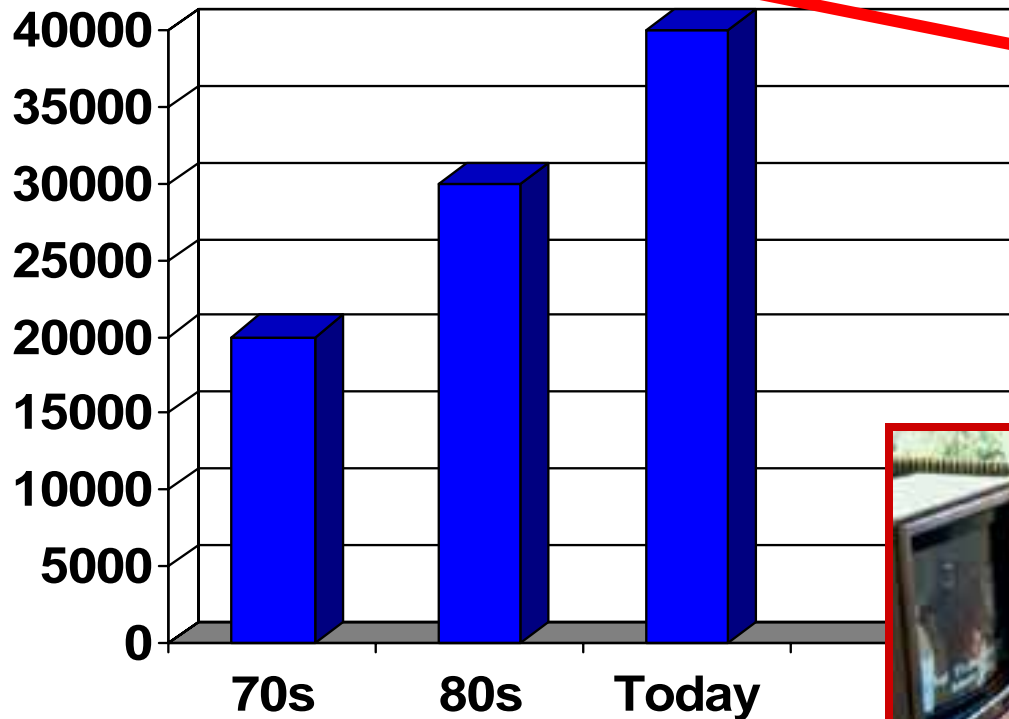
- **1,420 calories**
- **107 grams of fat**
- **7.1 hours of moderate walking**

# Supersizing Soda Consumption



-Wilkinson et al. Trends in Food and Nutrient Intakes by Children in the United States. Family Economics and Nutrition Review. 2002; 14(2):56-68.

# Supersizing Advertising :Number of TV Ads Seen By Children



**40,000 per year**



# Microsized Fitness of California's Children

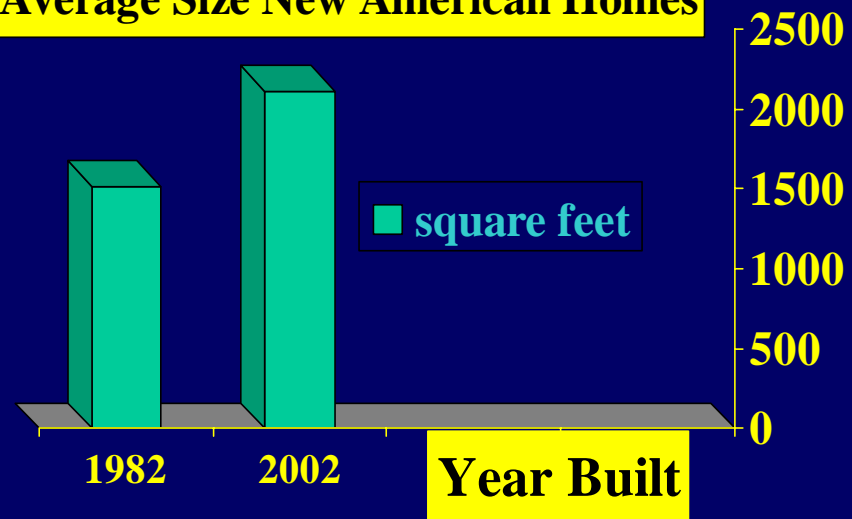
## Annual California Fitnessgram

- **Conducted in Grades 5, 7, and 9**
- **Measures 6 major fitness areas**  
(e.g. aerobic capacity, body composition, flexibility)
- **2004 Results: Who passed all standards?**
  - 25% → Grade 5**
  - 29% → Grade 7**
  - 26% → Grade 9**

# Supersizing Our Homes



Average Size New American Homes



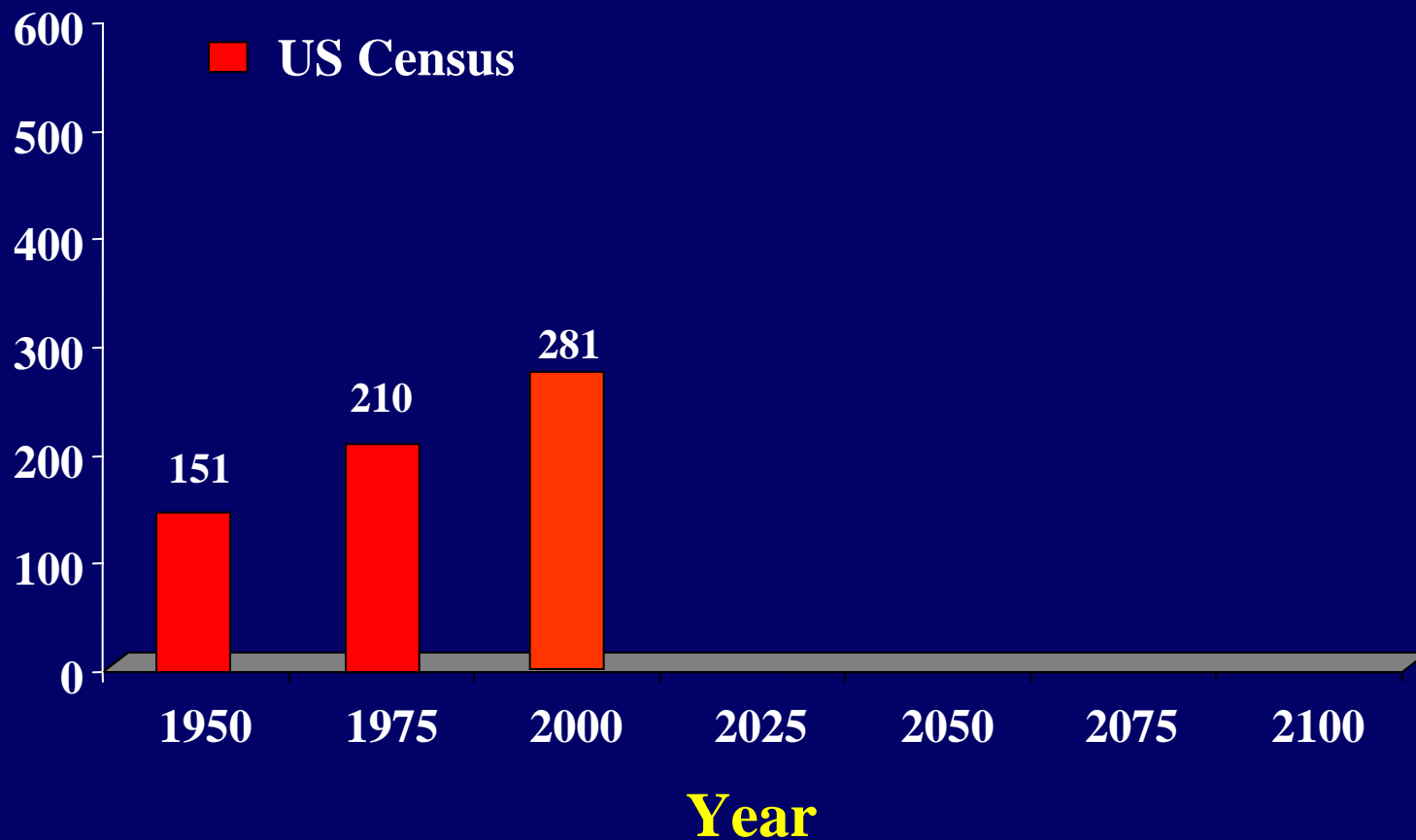
# Supersizing our Vehicles





# U.S. Population, 1990-2000

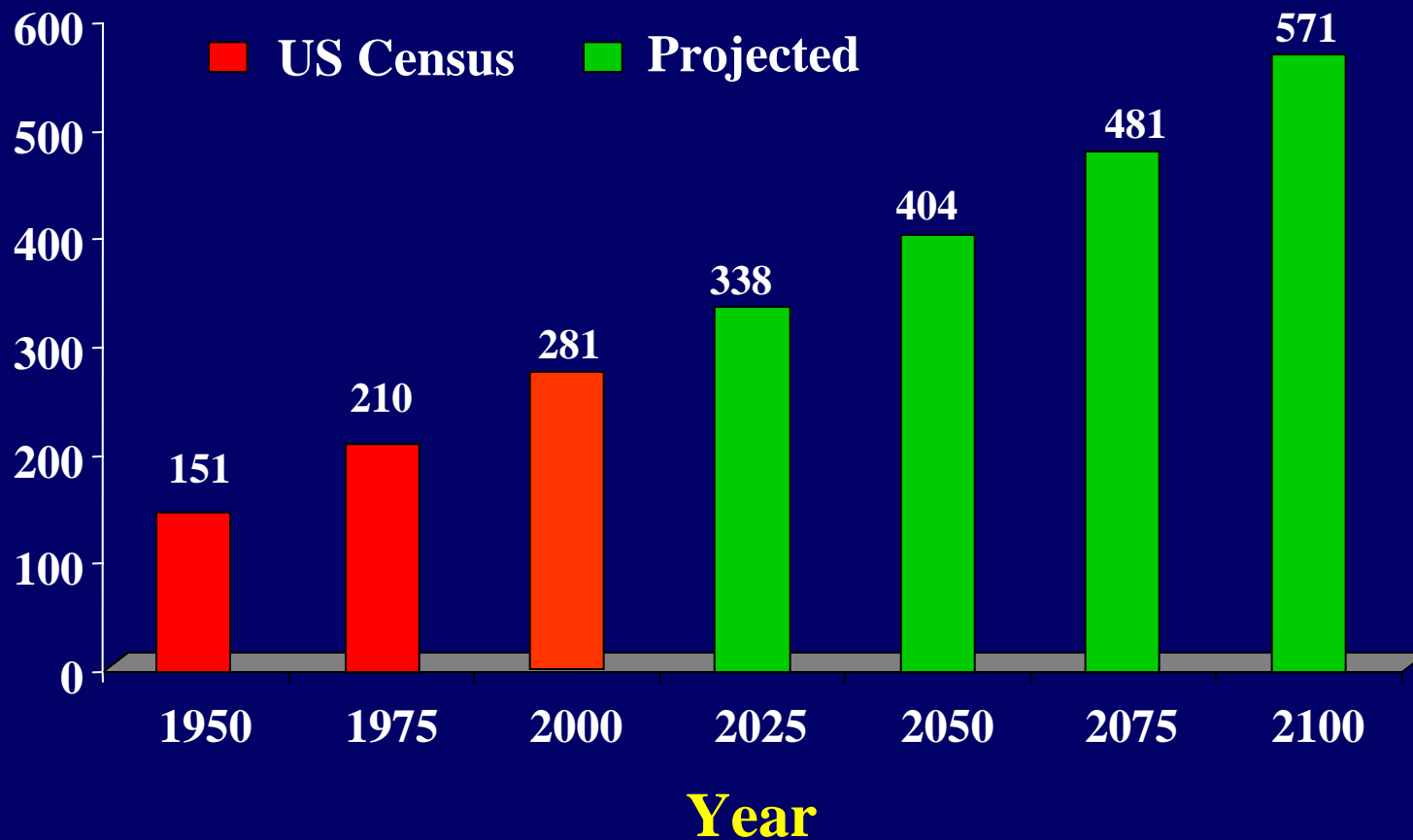
Number in millions



Source: U.S. Census Bureau

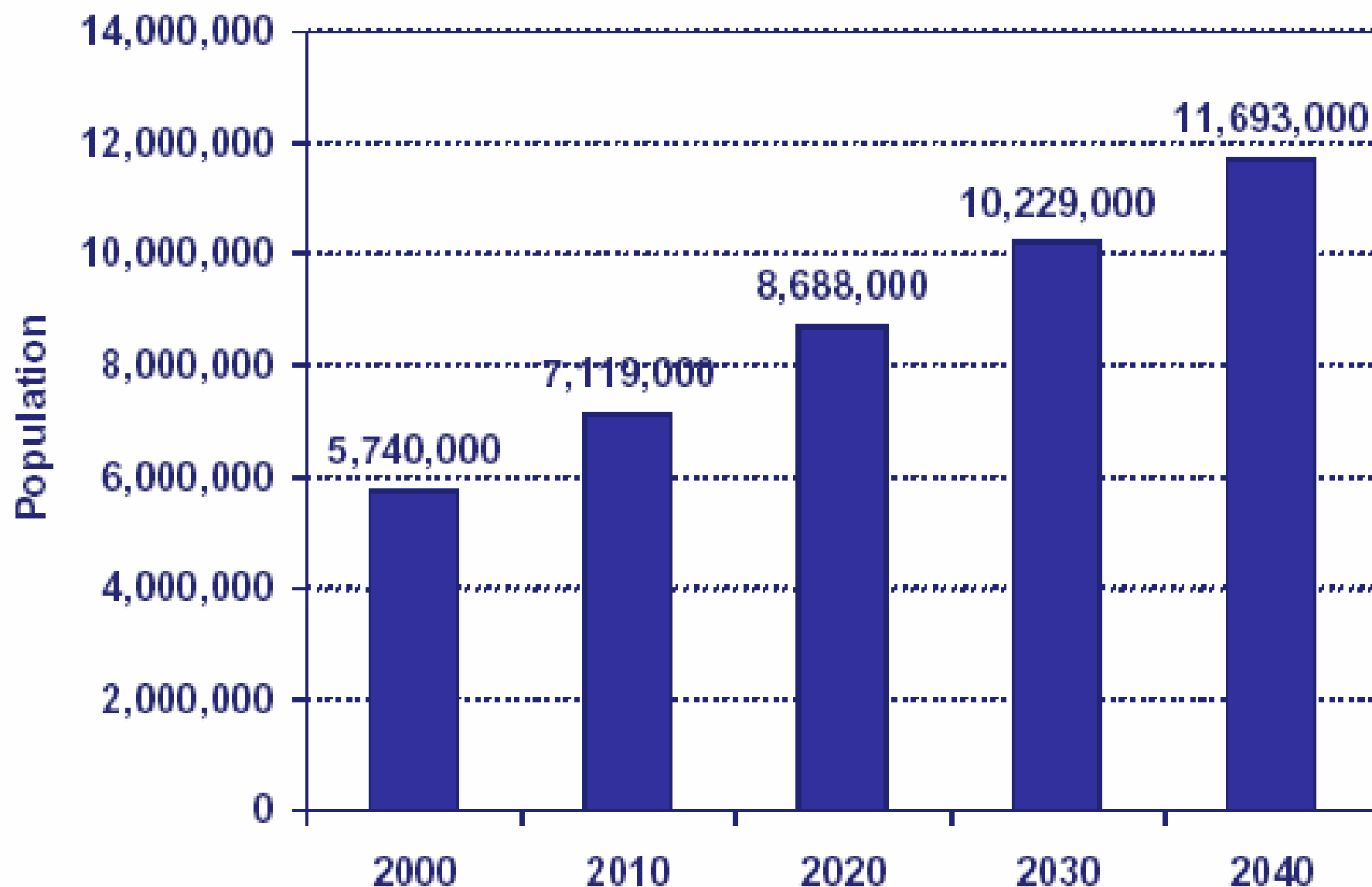
# U.S. Population, 1990-2100

Number in millions

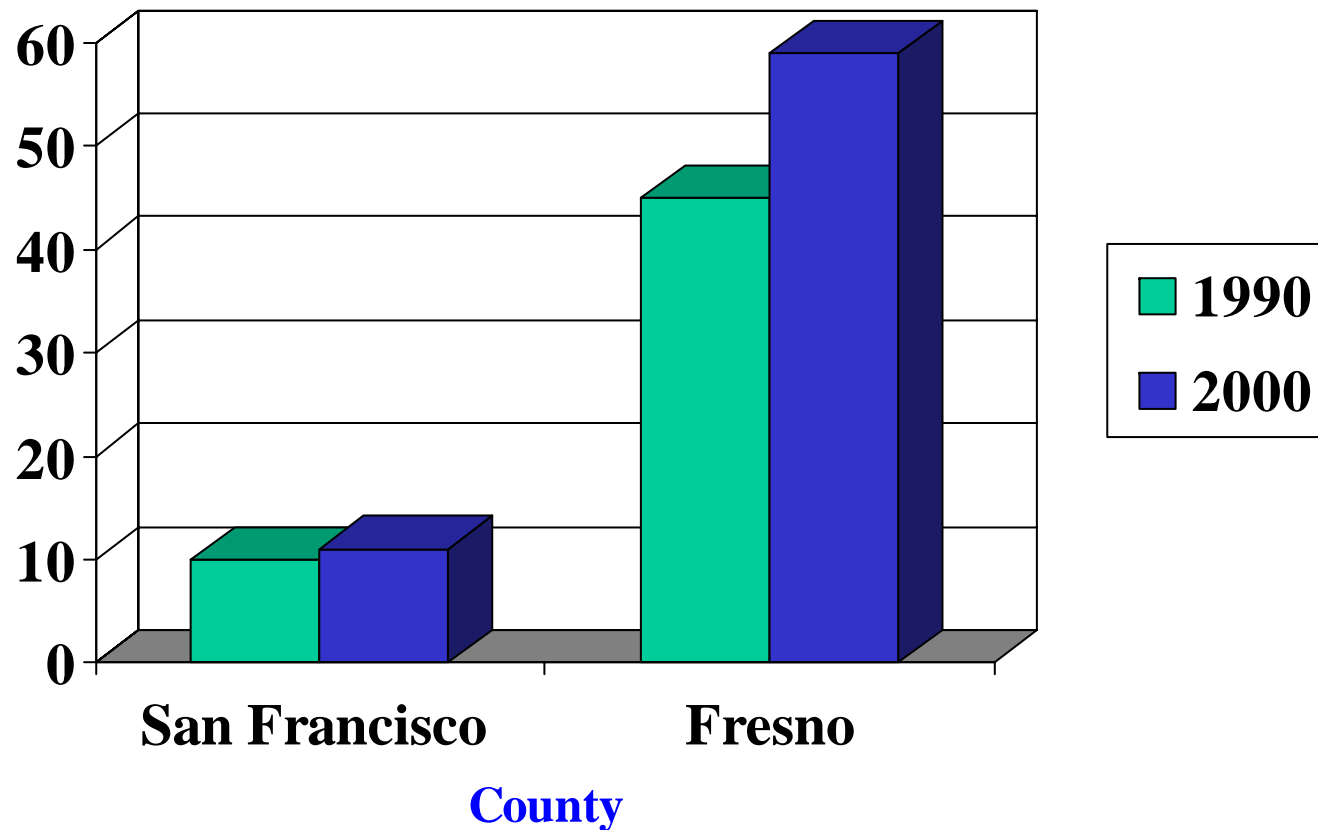


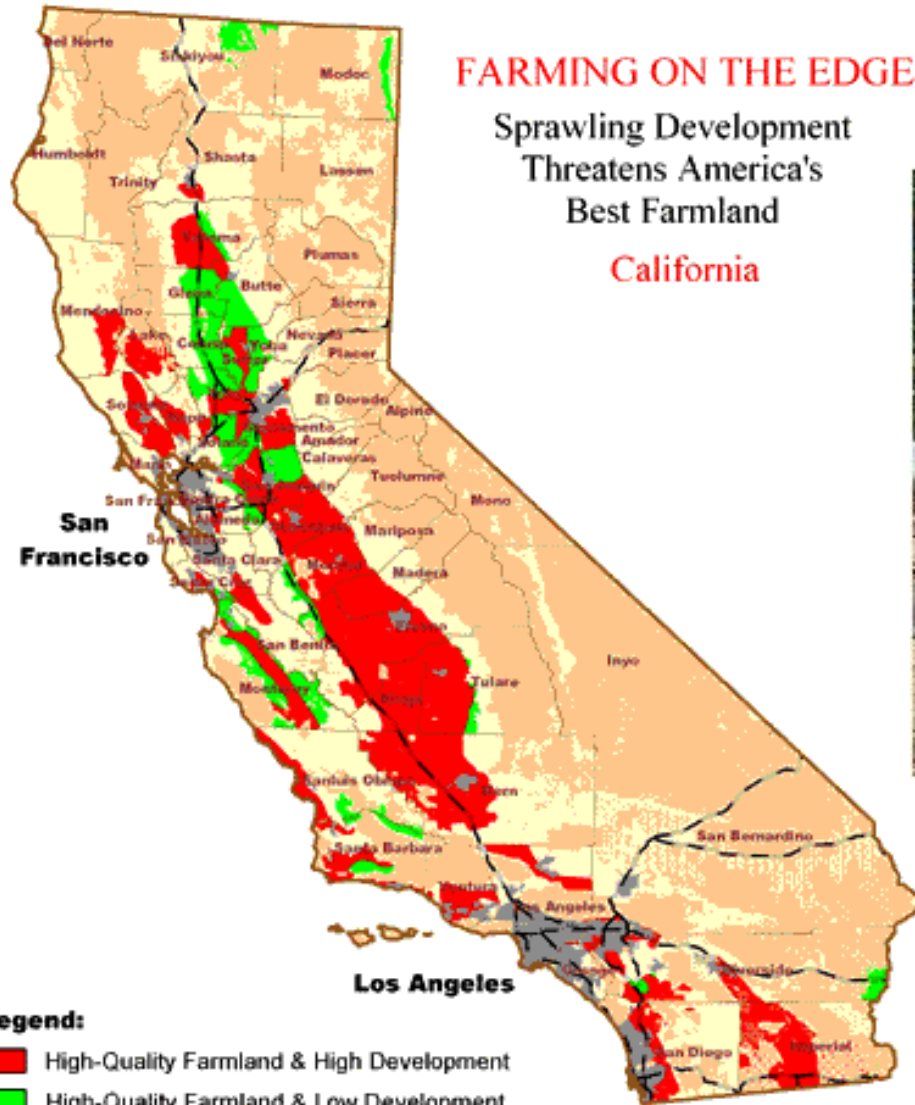
Source: U.S. Census Bureau

## Population Projections for the Central Valley



## Share of Households that can afford median priced home



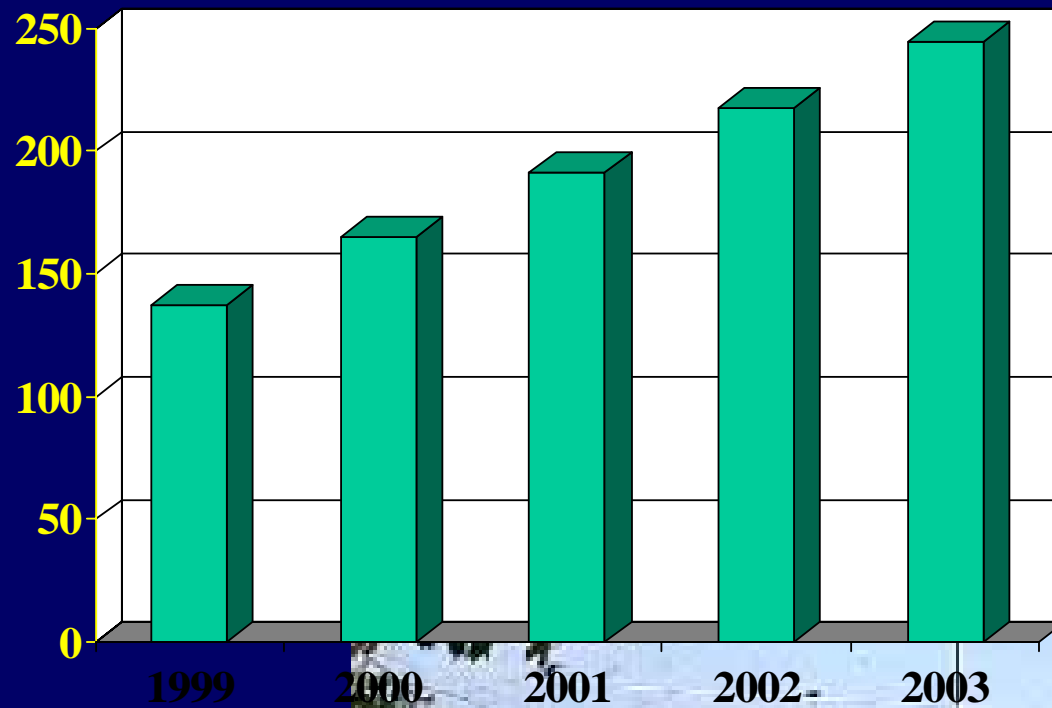




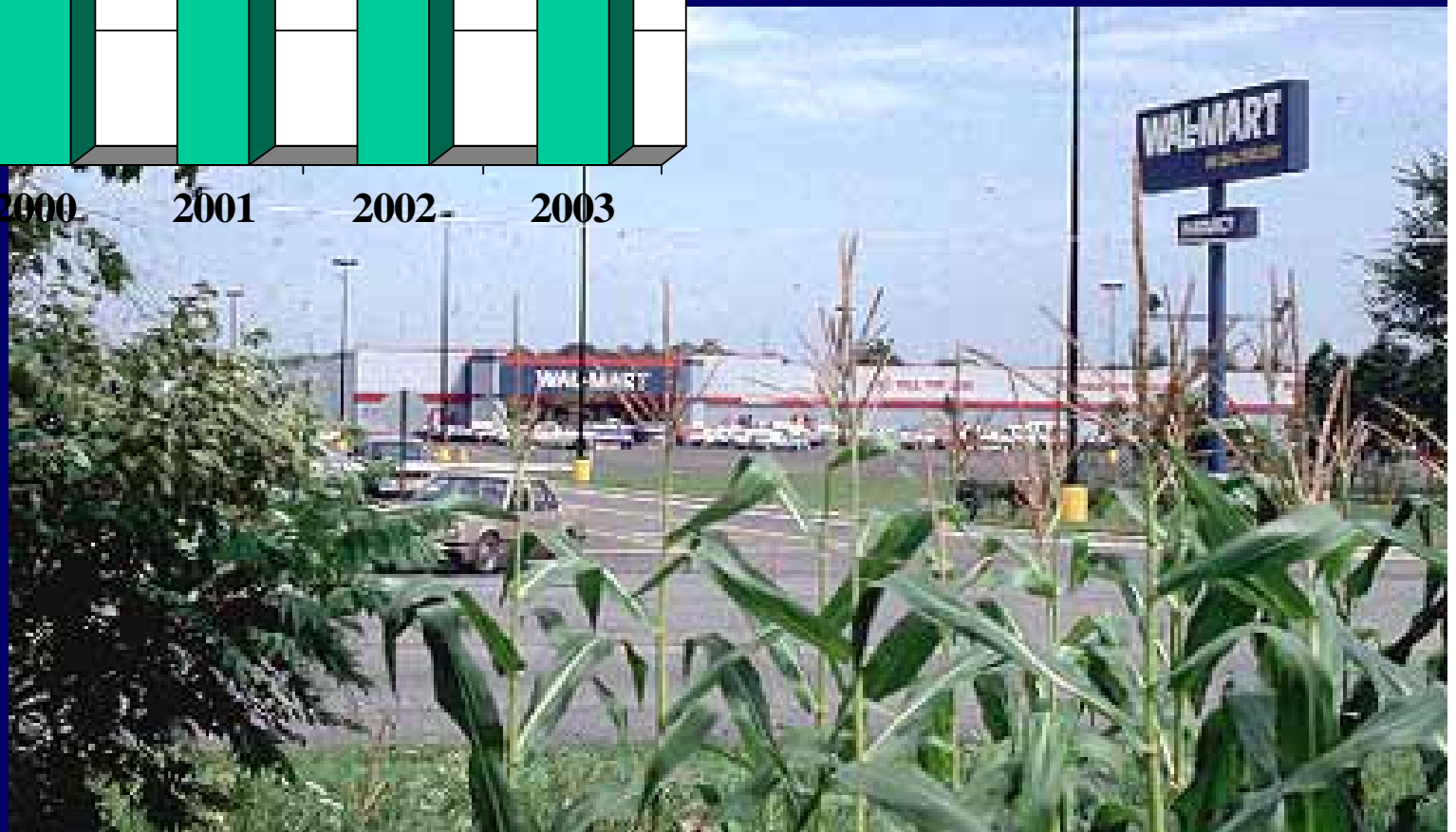
# Supersizing our Neighborhoods



# Supersizing Stores



**WalMart  
Annual  
Sales**





# Supersizing Land Consumption



**California Paves or Builds  
on over 400 acres every day**

# Land Development: US and Coastal

- In 225 years of Land Development in the US, more than 25% has been in the last 15 years.
- In Coastal Areas Development is consuming land five times faster than population is growing.





# Supersized Roads and Highways

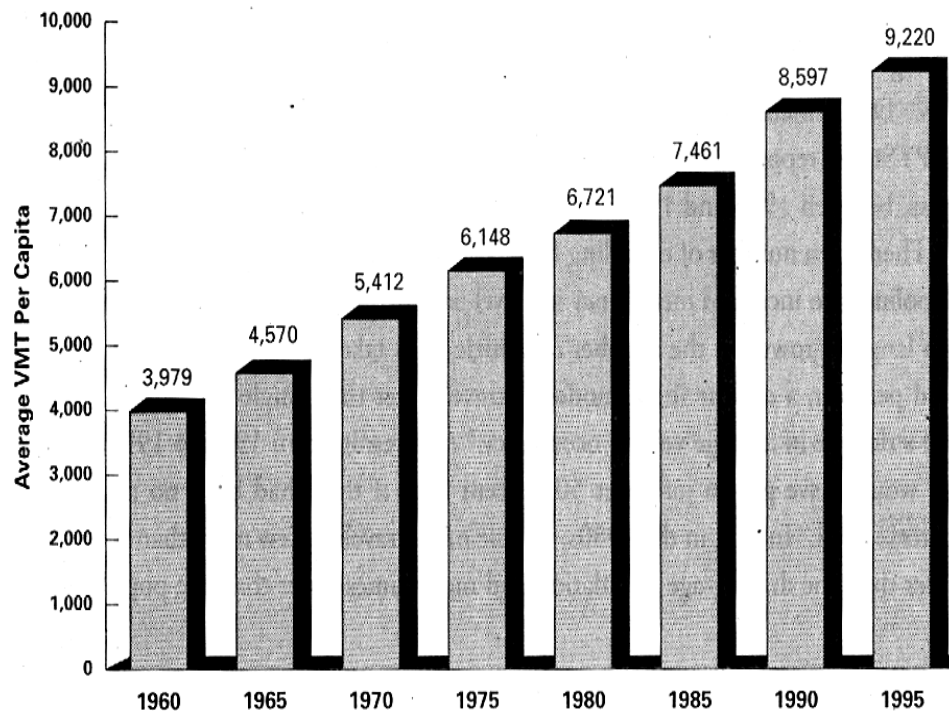


# Supersizing Vehicle Travel

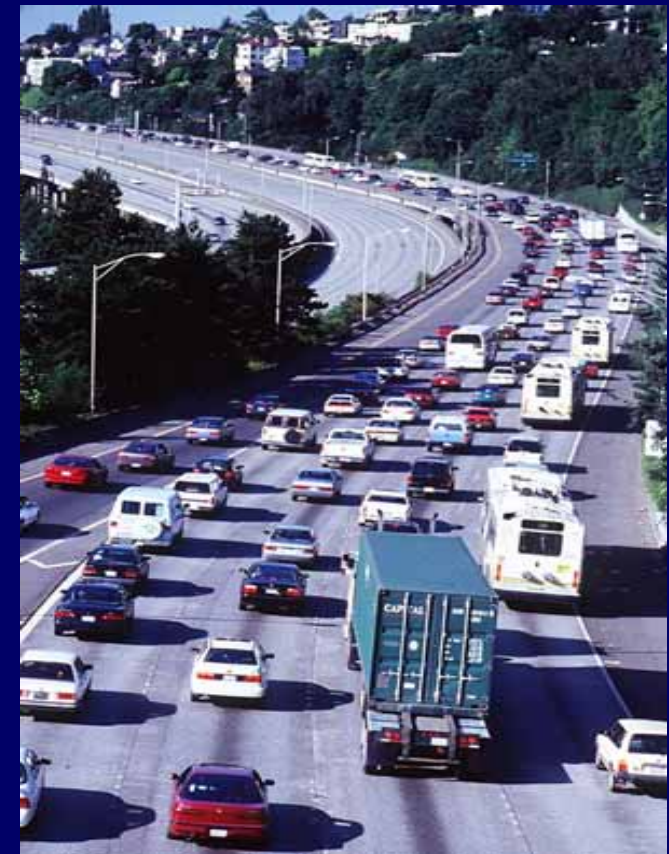
**Figure 2-2**

**Vehicle Miles Traveled (VMT) Per Capita, 1960–1995**

Source: Bureau of Transportation Statistics, U.S. Department of Transportation, *National Transportation Statistics 1998*, Washington, DC: 1998, Table 4-12; U.S. Bureau of the Census, "Historical National Population Estimates," Washington, DC: April 2, 1998.



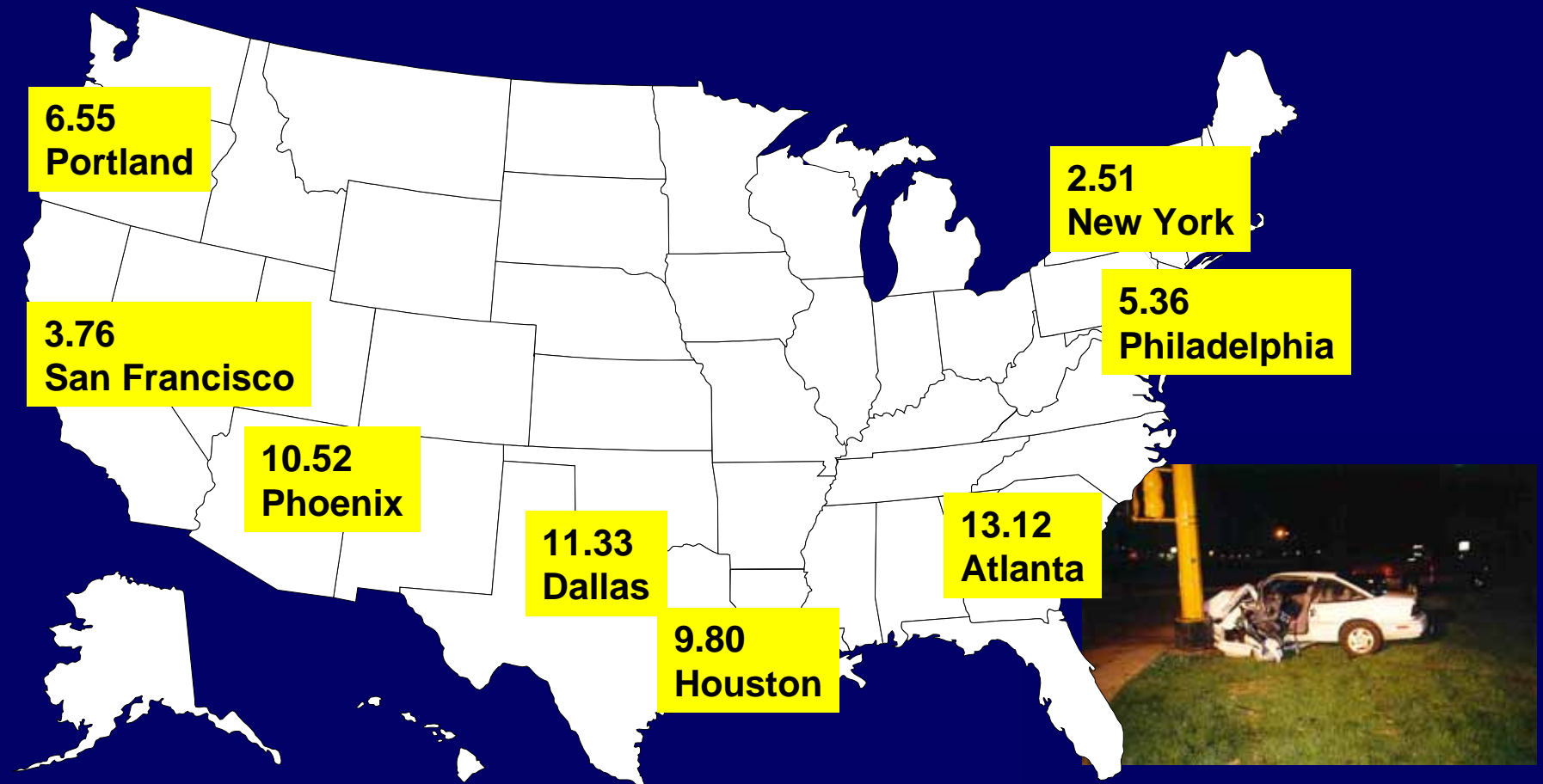
Miles per Capita: 1960 to 1995



From 4000 to 9200  
VMT per person

# Automobile fatality rates by city, 1998

(excluding pedestrian fatalities; deaths/100,000/year)



Source: NHTSA

One fatality per 66 million passenger miles





“Infiltration” of Water Brings Less Silting, Steadier and Cleaner, Base Flow.



# One Billion Parking Spaces



Chamblee, GA    Runoff to North Peachtree Creek



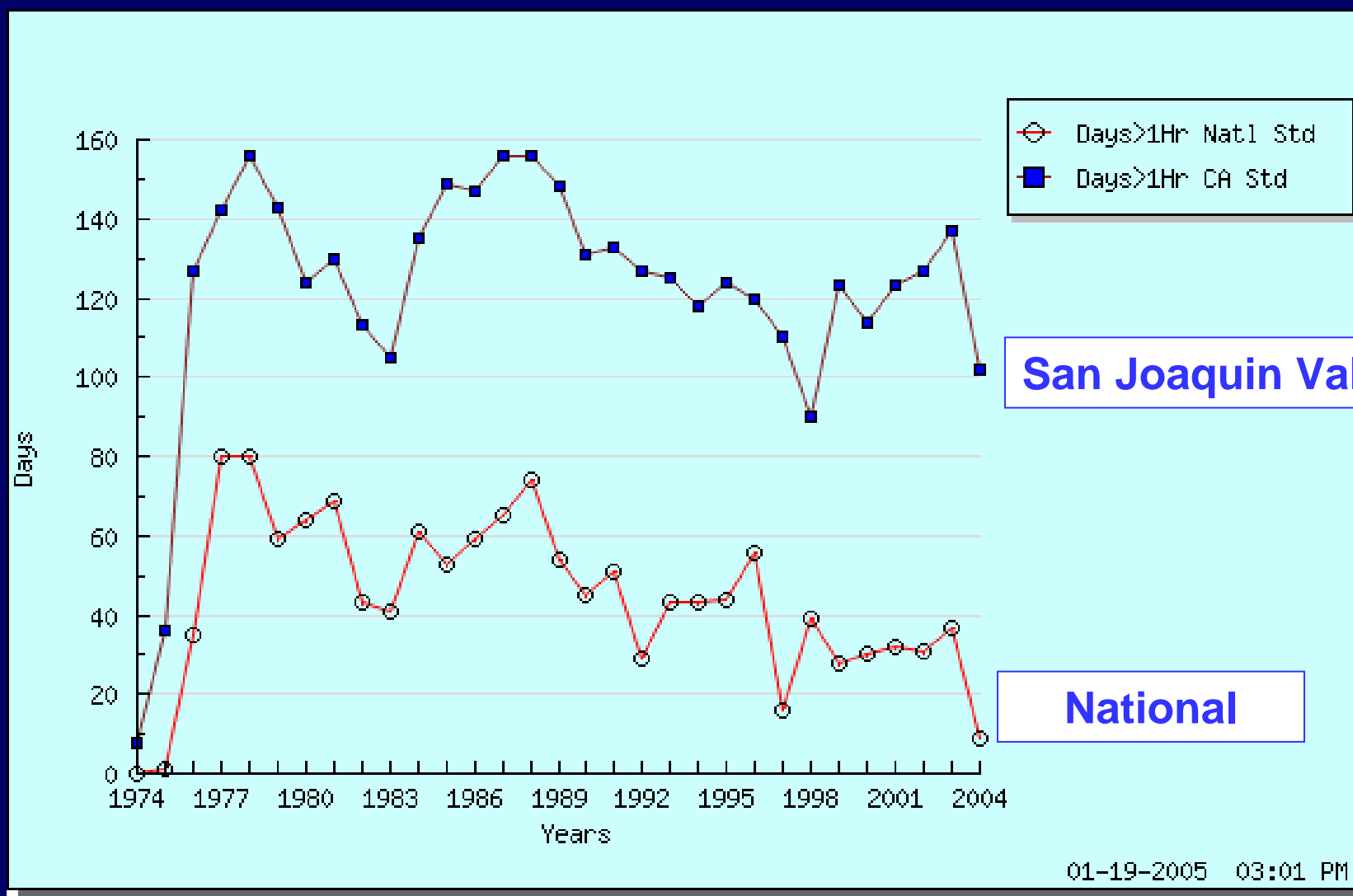
# Supersized Air Pollution in California

## 10 Worst Cities for Air Quality



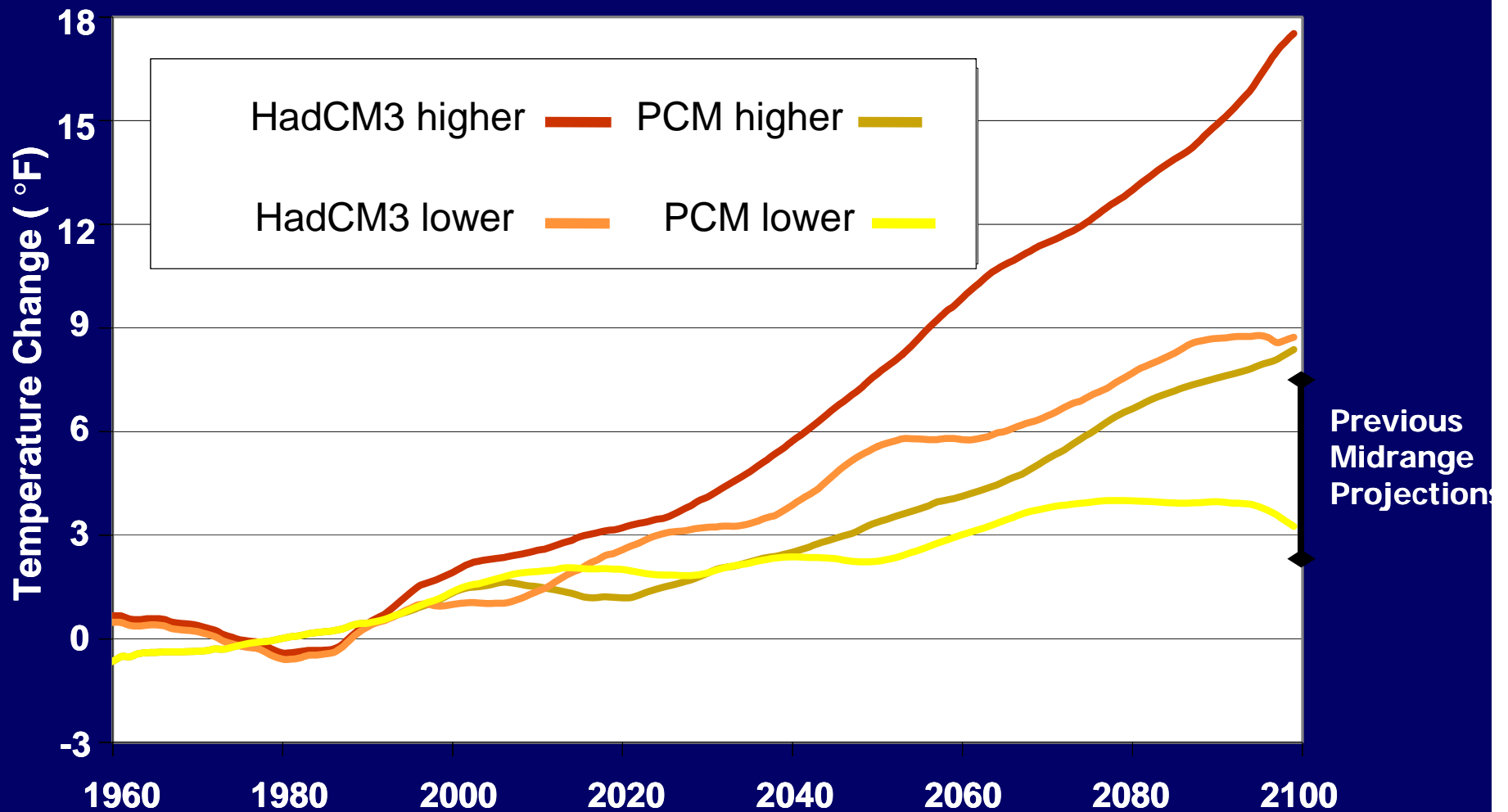
# Days Per Year when Ozone Standard Exceeded

## San Joaquin Valley vs. National



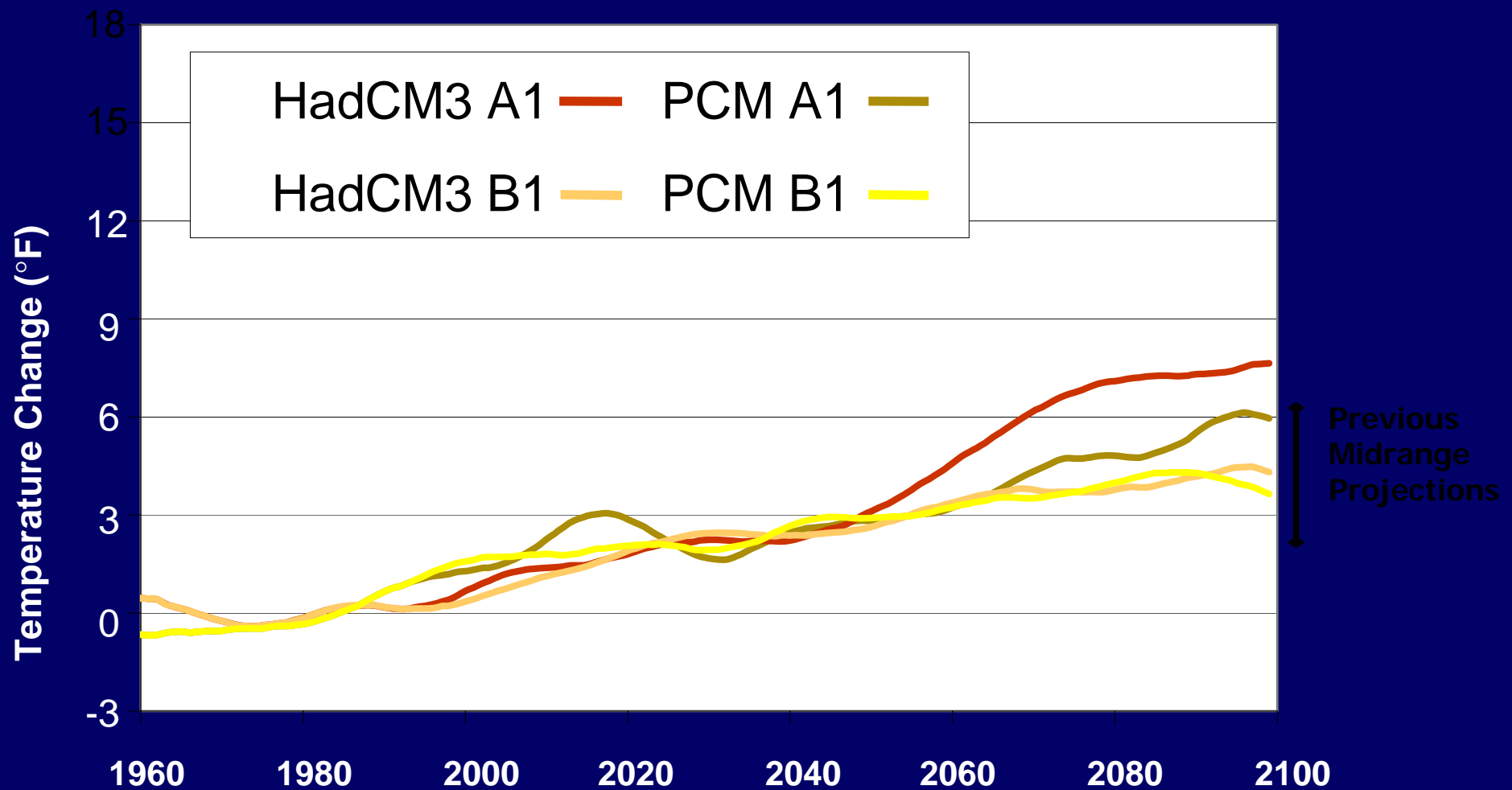
# Temperature Projections

## California, Summer (JJA)



# Temperature Projections

California, Winter (DJF)



# We Supersize Our Climate Impact

## Sierra Snowpack

% Remaining, Relative to 1961-1990

2020-2049

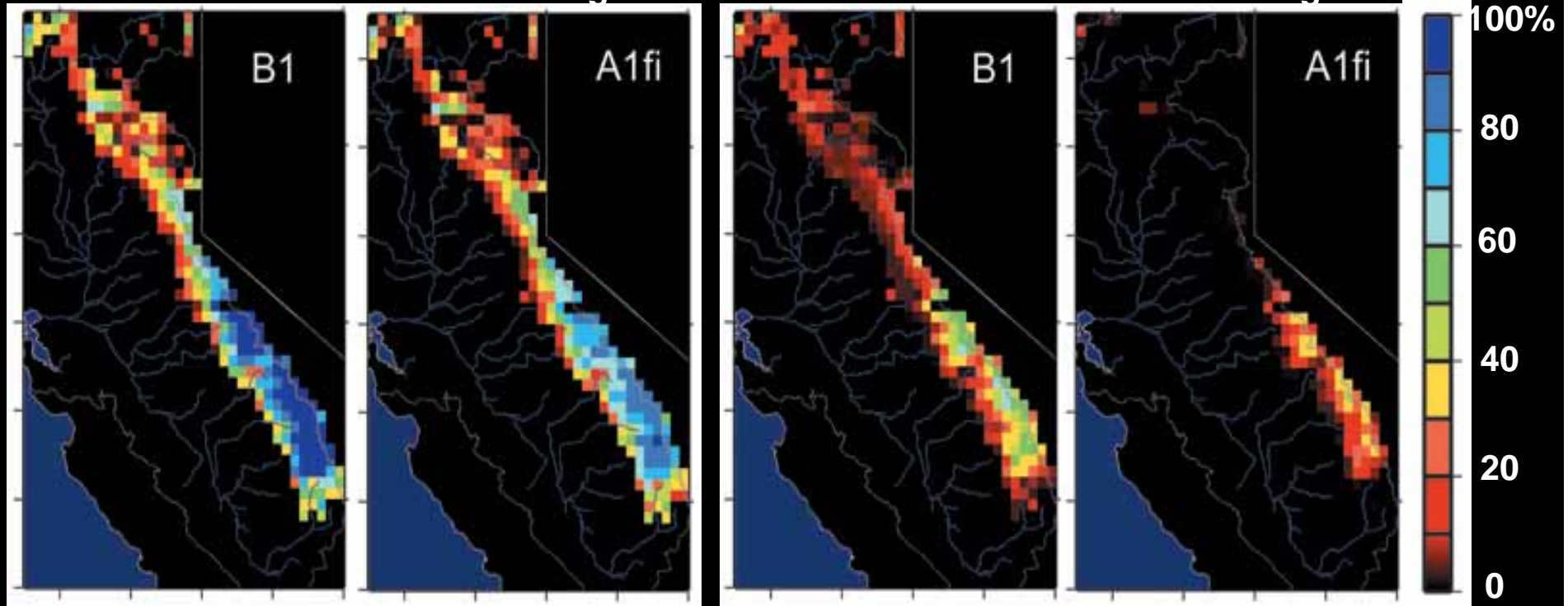
2070-2099

HadCM3 lower

HadCM3 higher

HadCM3 lower

HadCM3 higher



**“It is the occupation of a child to immerse herself in her environment”.**



# Children's Contact with Nature

- School age children with ADHD who had higher contact with nature showed better concentration, task completion, and following of directions.

*Coping with ADD: The Surprising Connection to Green Play Settings”  
Environment and Behavior, 33 (1), 54-77 AF Taylor, FE Kuo, WC  
Sullivan, 2001*

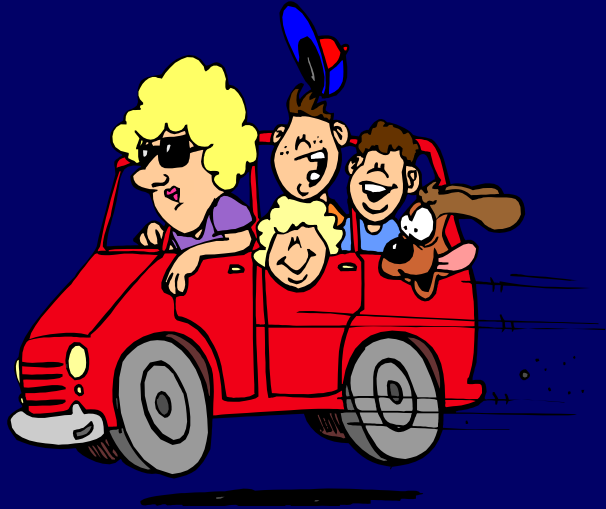




**Overall: Compared to 1969**

**Americans drive:**

- 88% farther to shop
- 137% farther for errands

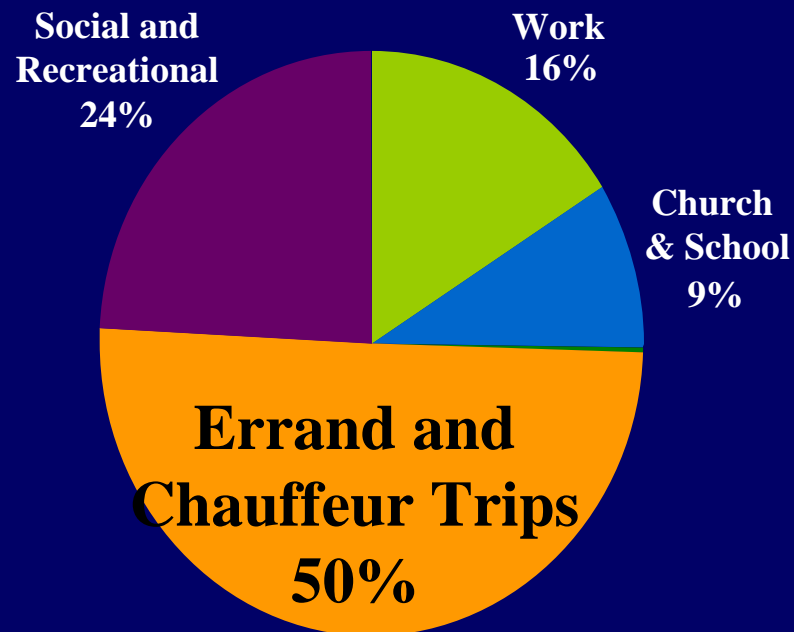


## **Mega-Mileage Moms**

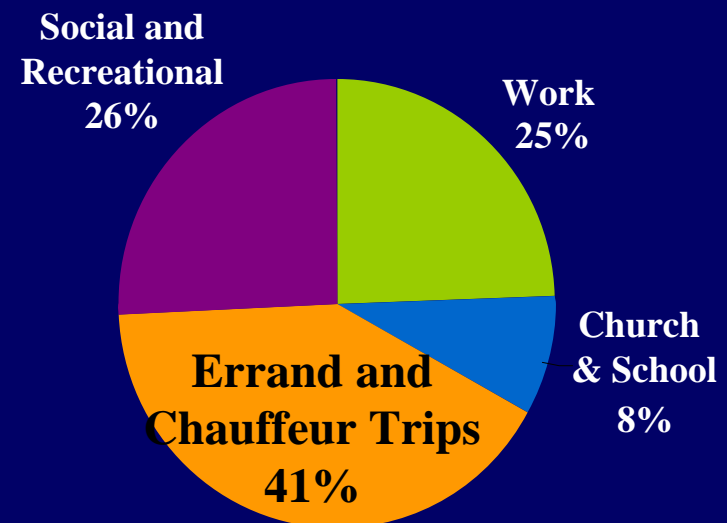
- Family “chauffeur”
- Average minutes per day spent in car:
  - Women overall: 64 minutes
  - Single mothers: 75 minutes

# Women and Men's Trip Making by Purpose, 1995

## Women



## Men



Source: Surface Transportation Policy Project

## Business Week –March 2005

- ... the fastest-growing group of work travelers in the country, people who rarely see their houses in daylight, leave home when their kids are still asleep, and mainline Red Bull just to stay awake. They're known as extreme commuters. *They spend at least a month of their lives each year traveling a minimum of an hour-and-a-half to work and back.*



# Supersizing Commutes

*“Trying to hang on in the Poconos: from before dawn to way past dusk”*

New York Times April 11, 2004



Up at 3:30 am,  
getting the  
children to  
childcare and  
taking the 5:15  
am bus to New  
York

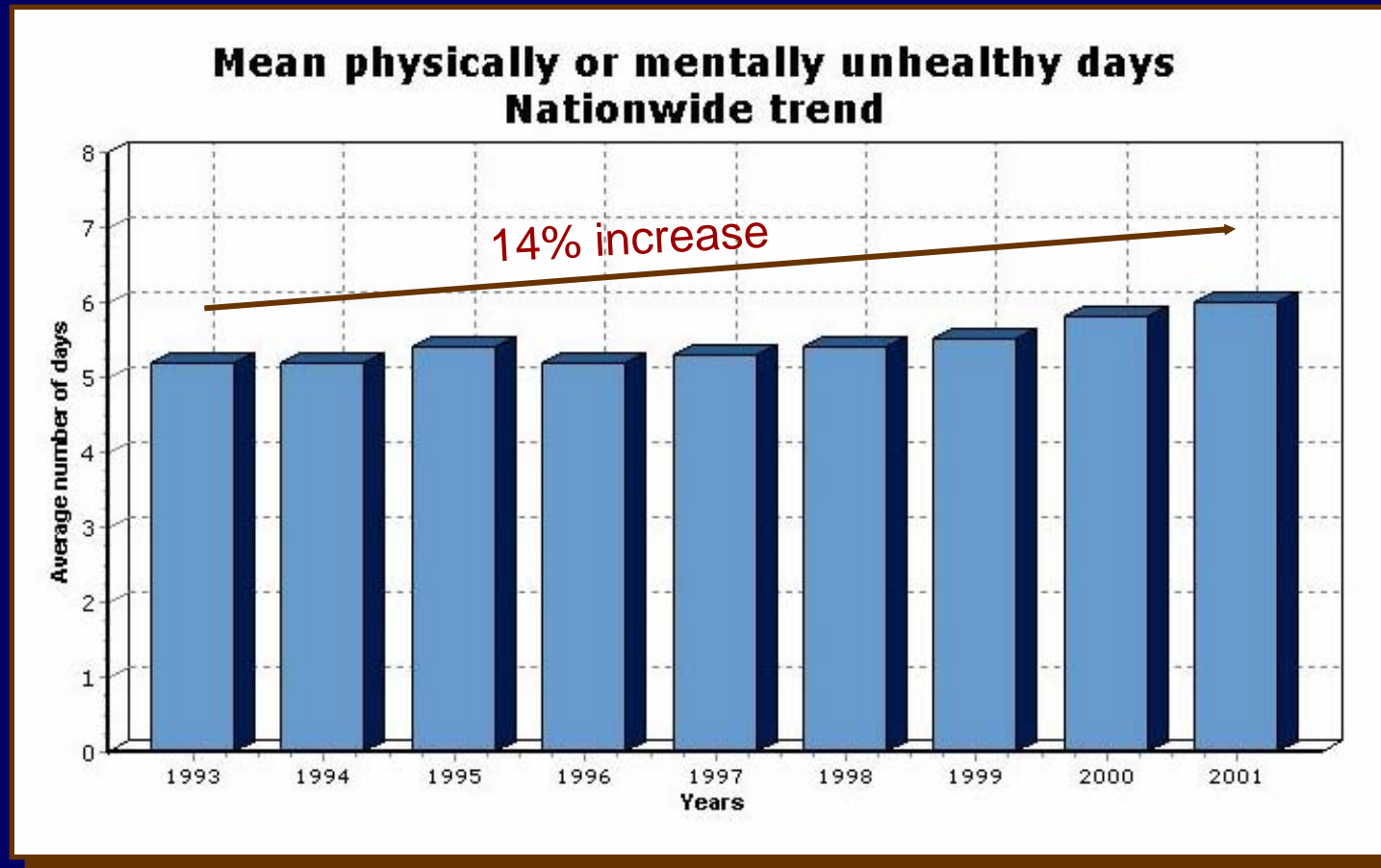




## **The mental health of our Children**

- ◆ **More than 1 million children and teens in the US are on antidepressants**
- ◆ **Childhood depression affects 1 in 20 children.**
- ◆ **Anti-depressant use increases by 10% annually in children and adolescents.**

# Supersizing the number of days per month Americans Feel Unwell: Quality of Life Prevalence Data



Source: Centers for Disease Control and Prevention. Health-related quality of life: prevalence data. National Center for Chronic Disease Prevention and Health Promotion, 2003. Accessed March 21 at <<http://apps.nccd.cdc.gov/HRQOL/>>.

19 million  
American  
adults

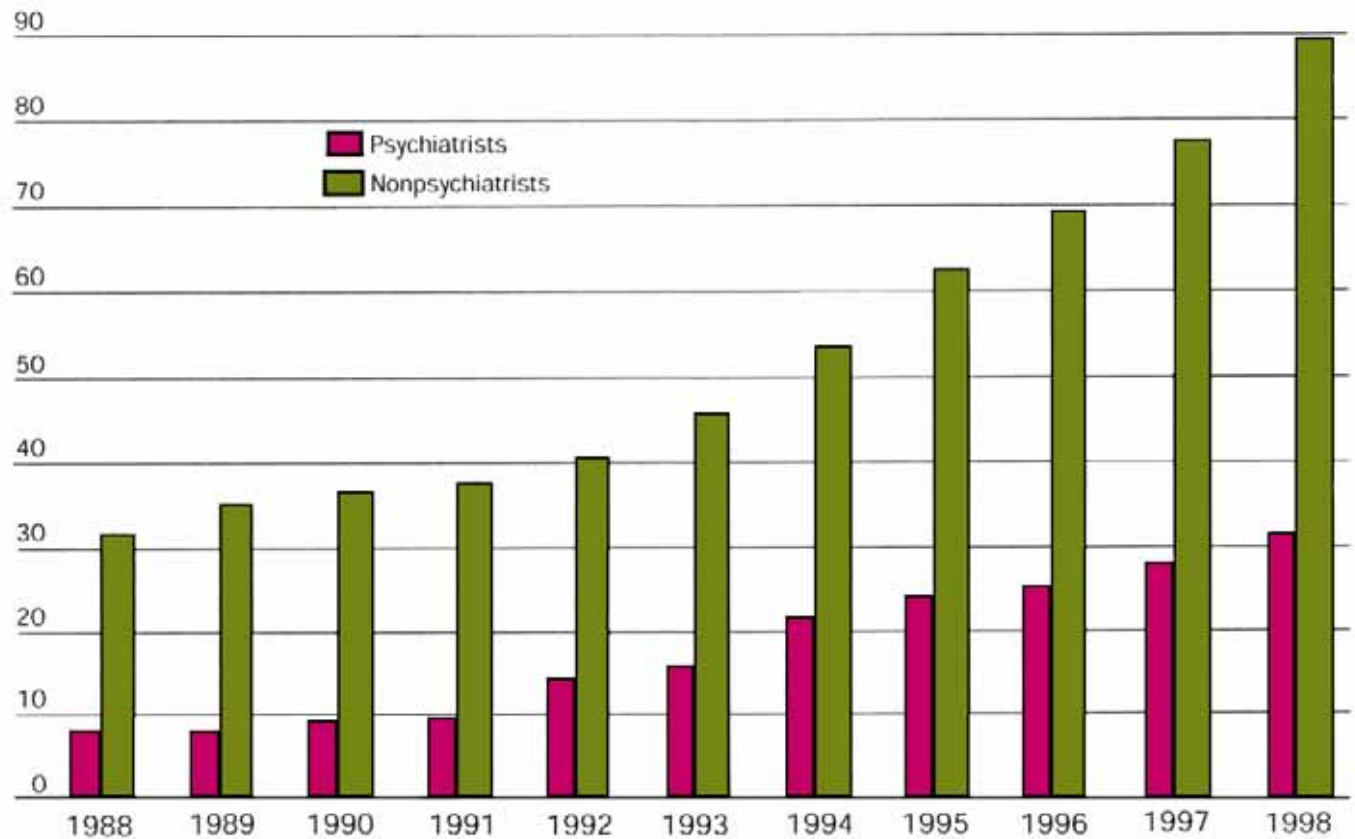
# Supersized Rates of Depression

- Leading cause of disability in the U.S. and worldwide



**Antidepressant Prescriptions By Physician Specialty, 1988–1998**

Millions of prescriptions



**SOURCE:** IMS Health, Inc.  
**HEALTH AFFAIRS - Volume 19, Number 4**



# Supersized Schools

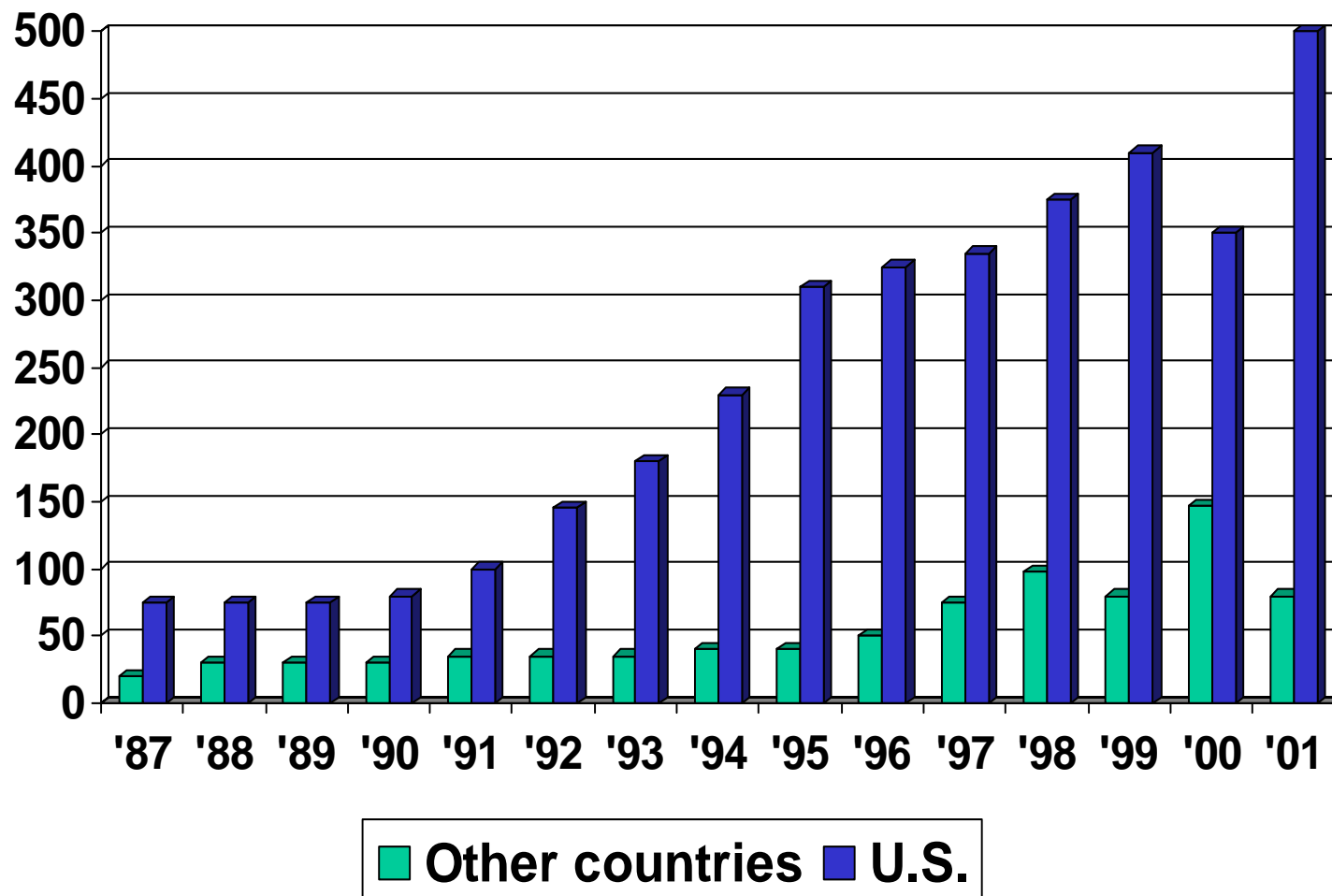


Credit: South Carolina Coastal Conservation League



Credit: Constance E. Beaumont, NTHP

## Methylphenidate (Ritalin) Consumption, United States and Elsewhere: 1987 - 2001



Source: Science, Vol. 289, 4 August 2000, p. 721 and International Narcotics Control Board, 2002

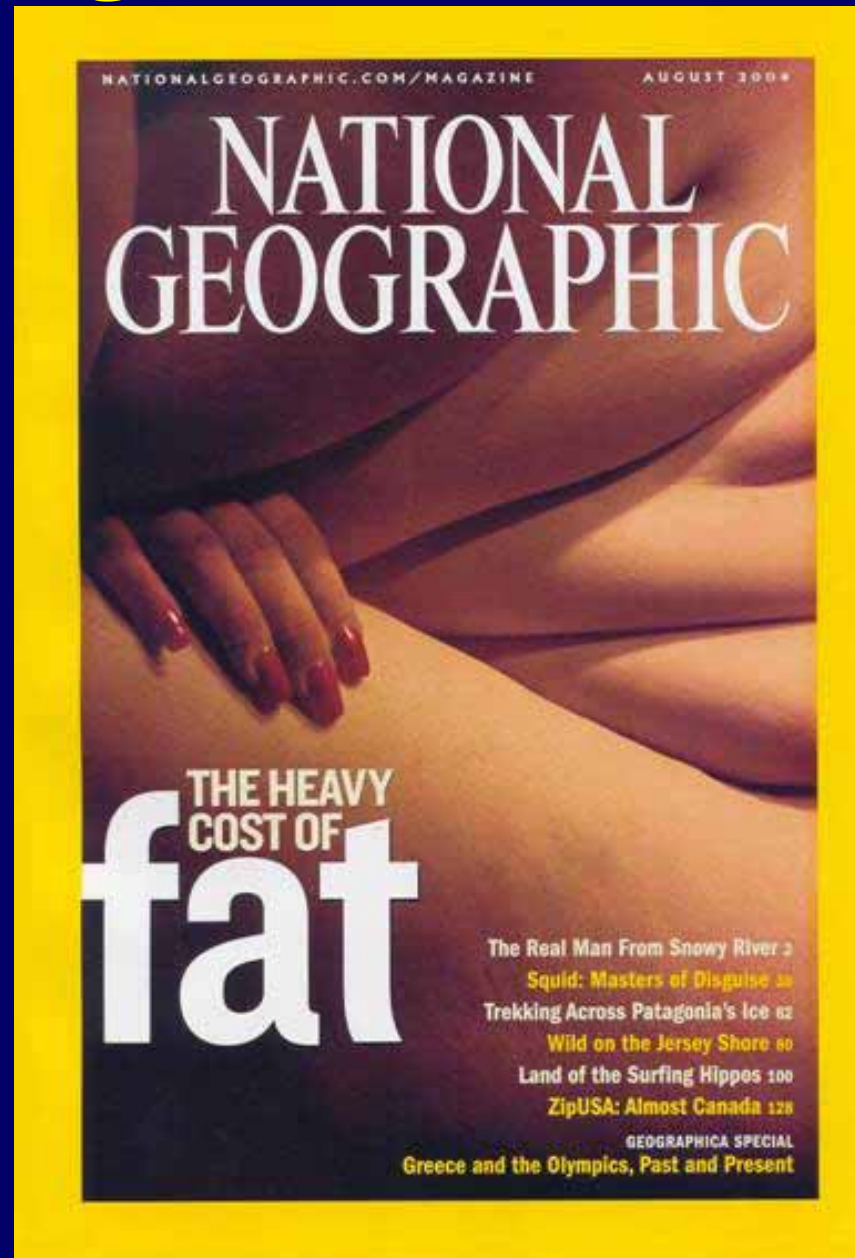
- “...students have better attendance, are less likely to drop out, exhibit fewer discipline problems, and perform better when attending a smaller high school.”



Credit: Constance E. Beaumant, NTHP

Secretary of Education Richard Riley    Oct 4, 2000

# Supersizing our Bodies

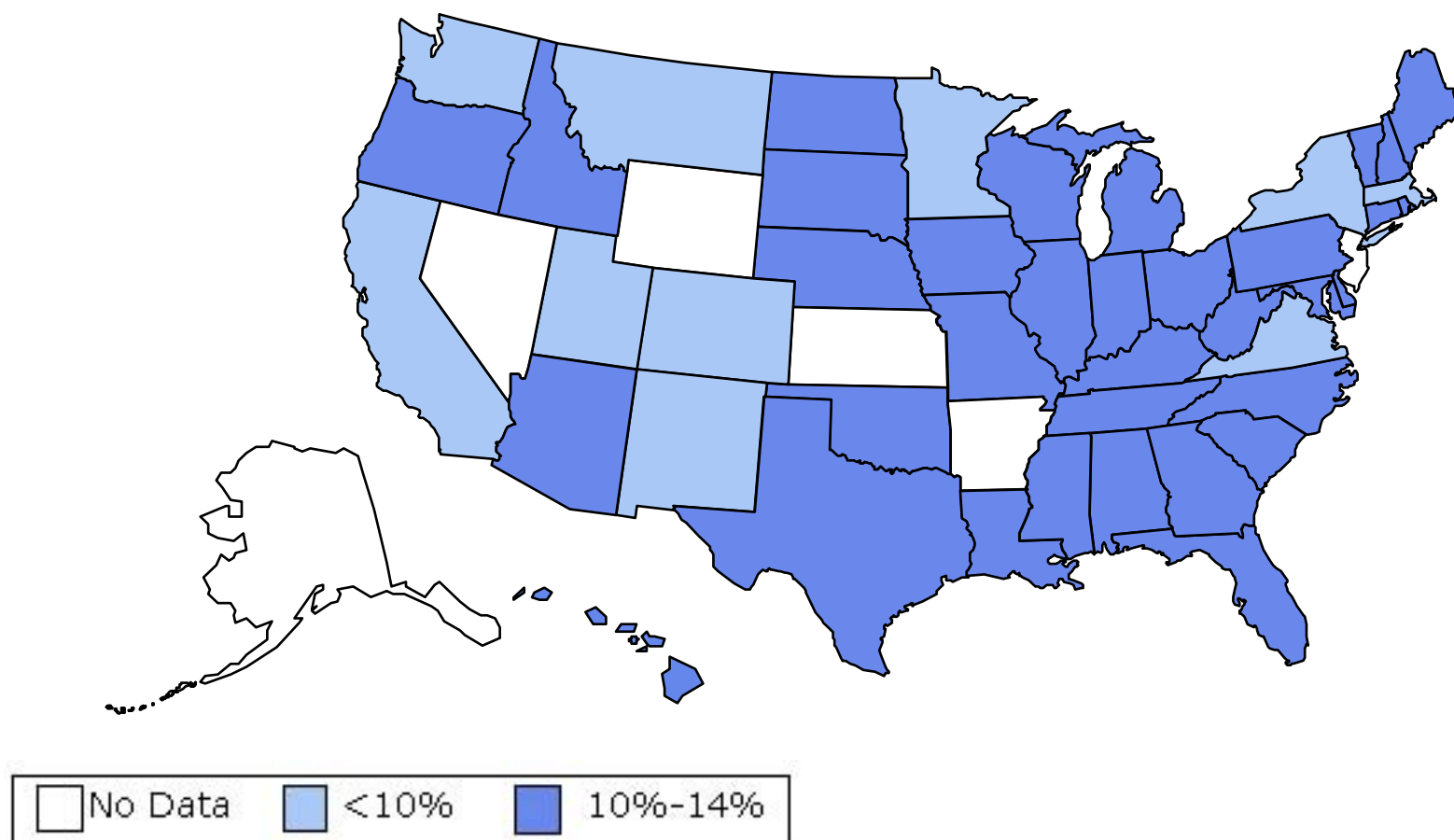




# Obesity Trends\* Among U.S. Adults

## BRFSS, 1990

(\*BMI  $\geq 30$ , or  $\sim 30$  lbs overweight for 5'4" woman)

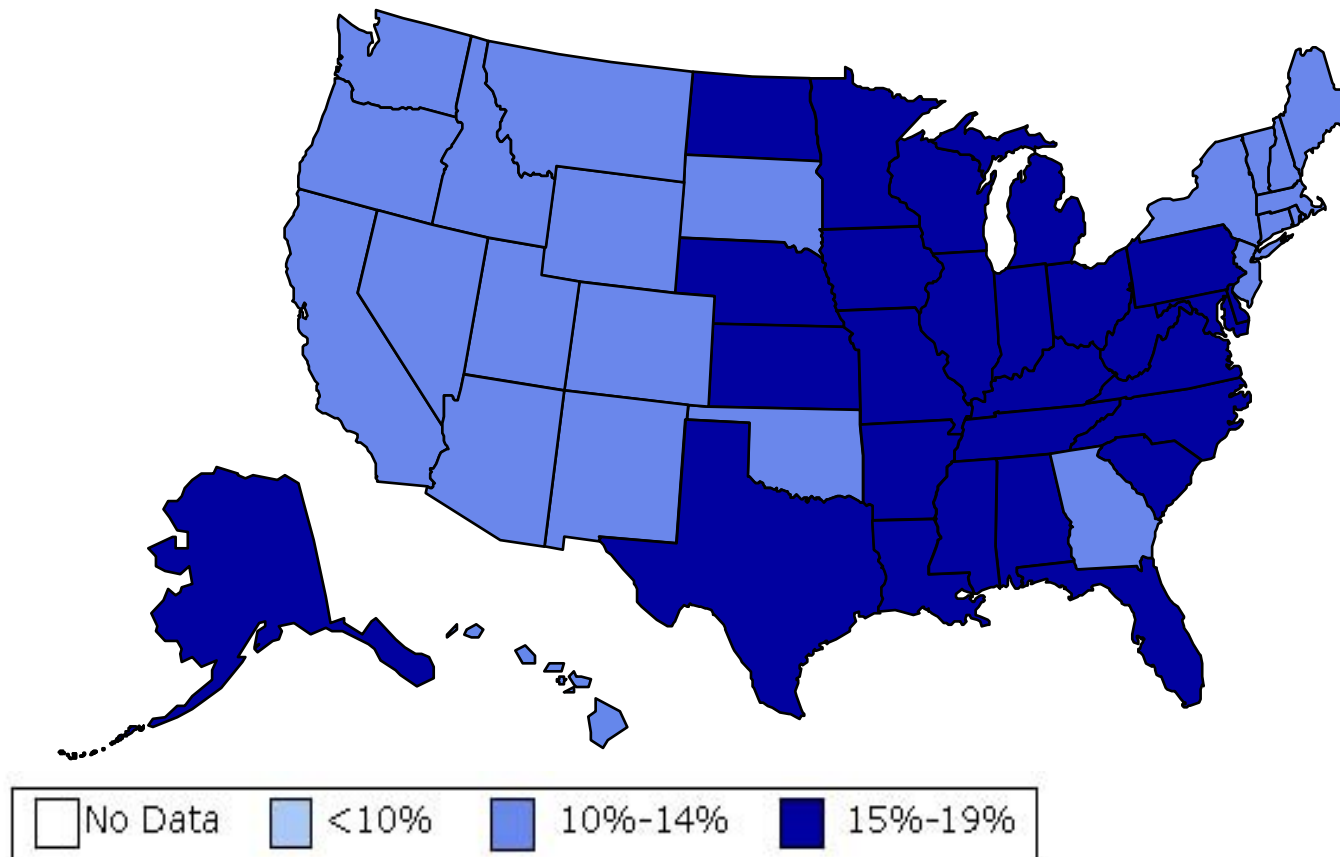


Source: Mokdad A H, et al. *J Am Med Assoc* 1999;282:16, 2001;286:10.

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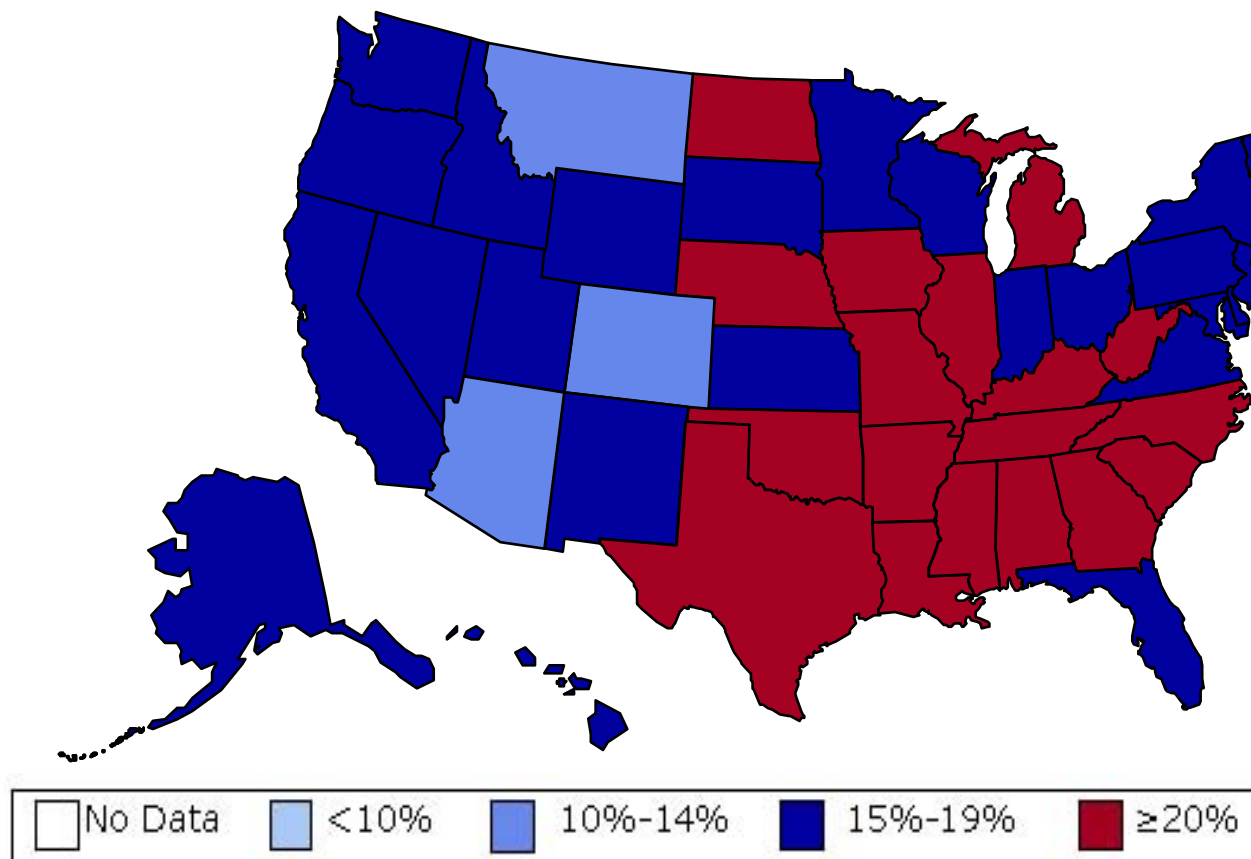


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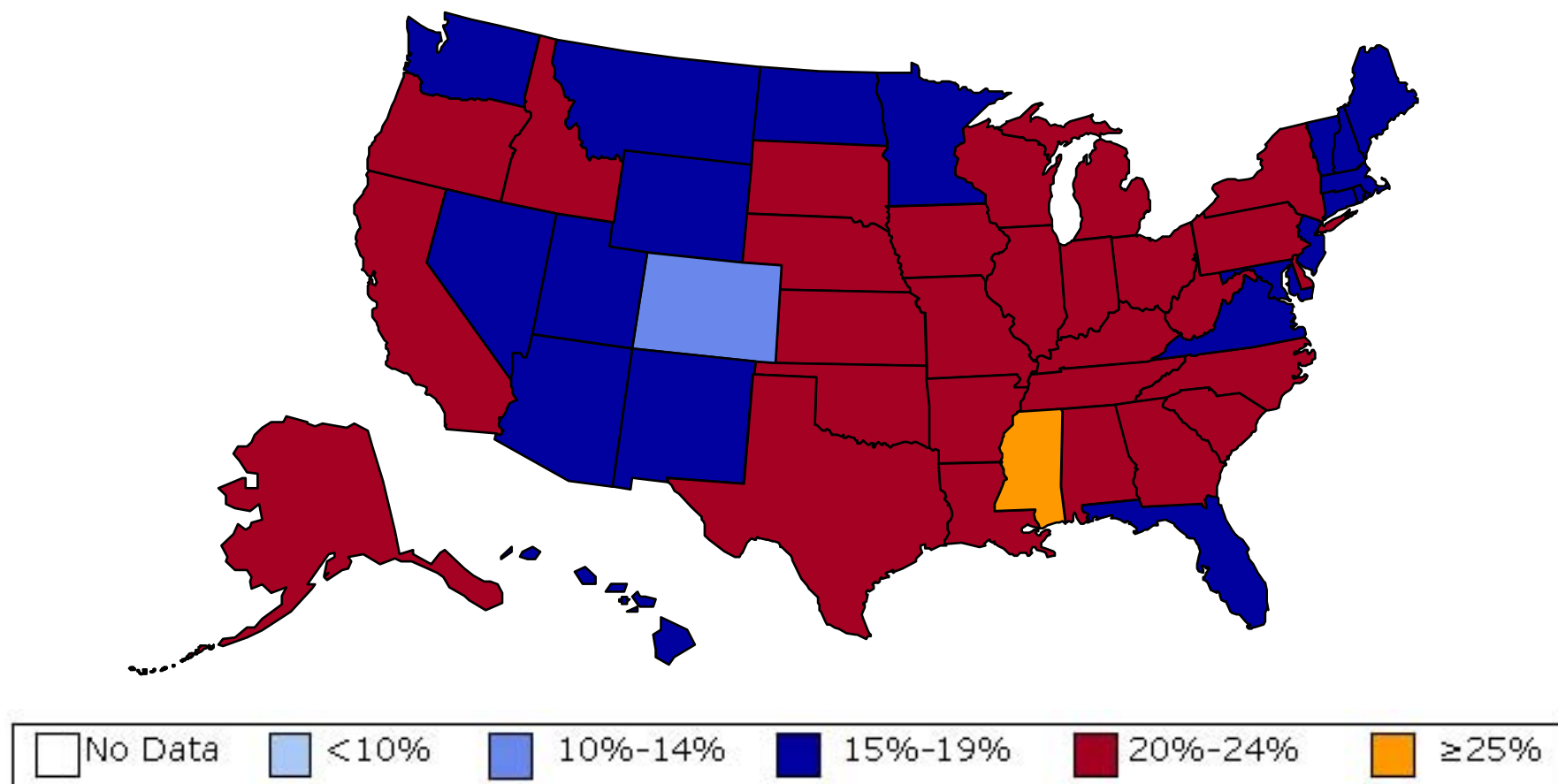


Source: Mokdad A H, et al. *J Am Med Assoc* 1999;282: 16, 2001;286: 10.

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(\*BMI  $\geq 30$ , or  $\sim 30$  lbs overweight for 5'4" woman)



Source: Mokdad A H, et al. *J Am Med Assoc* 1999;282:16, 2001;286:10.

# US Obesity Woes Put a Strain on Hospitals



WSJ.com THE WALL STREET JOURNAL ONLINE

HEALTH

May 1, 2002

FROM THE ARCHIVES: May 1, 2002

## U.S.'s Obesity Woes Put a Strain On Hospitals in Unexpected Ways

By RHONDA L. BUNDLE  
Staff Reporter of THE WALL STREET JOURNAL

When an extremely heavy man spent several weeks at a Kaiser Permanente hospital in Fresno, Calif., two years ago, employees suffered a string of injuries providing routine care for the nearly 500-pound patient.

"We can document five injuries, but there may have been as many as 11 from anecdotal evidence," says Barbara Smisko, director of Western environmental health and safety services at Kaiser, the Oakland, Calif., health-maintenance organization. "It's a dramatic story, but it characterizes the kinds of things that happen to patients and staff every day."

The fact that more Americans are obese is putting a new strain on the nation's health-care system in

### OBESITY IN AMERICA

- Health-Care Costs for Obesity Top Those Related to Smoking<sup>1</sup> 03/12/02
- Obesity May Soon Kill More Americans Than Cigarettes, Surgeon General Says<sup>2</sup> 12/13/01

### Adjusting for Special Needs

A sampling of hospital products for obese patients:

Product/Company	Features	List Price
Bariatric wheelchairs Gendron	Up to 32-inch wide seat and weight capacity up to 850 lbs.; can be custom-built to any patient requirement	From \$680 to \$4,130
Burke Tri-Flex bed Burke	1,000 pound patient capacity; fully electric; clears 42-inch doorways	\$11,995
First Step Select Pressure Relief Mattress Overlay Kinetic Concepts	Adjustable air pressure in mattress; non-skid material; weight capacity up to 650 lbs.	Not available
Magnum II Bariatric Patient Care System Hill-Rom	A bed that functions as a chair and transport vehicle; holds up to 600 lbs.	\$26,000 and up
UltraTwin	Lifting	\$11,000

Advocacy Center in San Diego. "I get calls and e-mails on an average of five to 10 a month" from people who "sought treatment at a hospital and were told that it couldn't take care of them," he says.

Certainly, some hospitals view the growing popularity of weight-loss surgery as an opportunity -- both to build business and to improve obesity treatment in their communities. They are setting up bariatric wings for gastric surgery, which reduces the capacity of a patient's stomach. The American Society for Bariatric Surgery estimates there were 57,200 procedures last year, a 29% increase from 2000. "We don't see it slowing down anywhere," says Georgann Mallory, executive director of the Gainesville, Fla., association. The average hospital cost for bariatric surgery is about \$20,000, she says.

More commonly, though, hospitals worry about the safety of nurses, physical therapists, and other



# Super-sizing: More Jet Fuel Use

- Mean weight gain of Americans in 1990s:  
10 pounds
- Airline distance flown in 2000 in US:  
515 billion passenger-miles
- Weight transported 1 mile by 1 gallon of fuel:  
7.3 tons (passengers or cargo)
- Jet fuel to transport added weight in 2000:  
350 million gallons
- Cost of extra fuel: \$275 million
- CO<sub>2</sub> emissions from extra fuel:  
3.8 million tons

Data sources: NCHS; US Dept. of  
Transportation

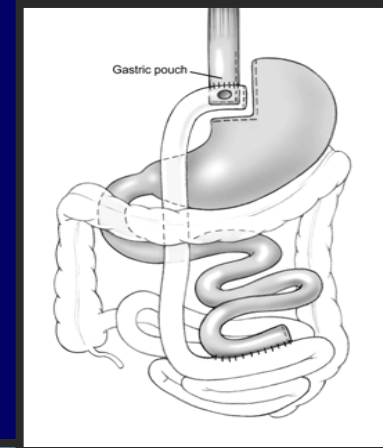


# GI Surgery for Severe Obesity

## *Risk and Complications:*

- 10-20% require follow-up surgery
- Abdominal hernia
- Break down of staple line
- Gallstones
- 30% develop nutritional deficiency

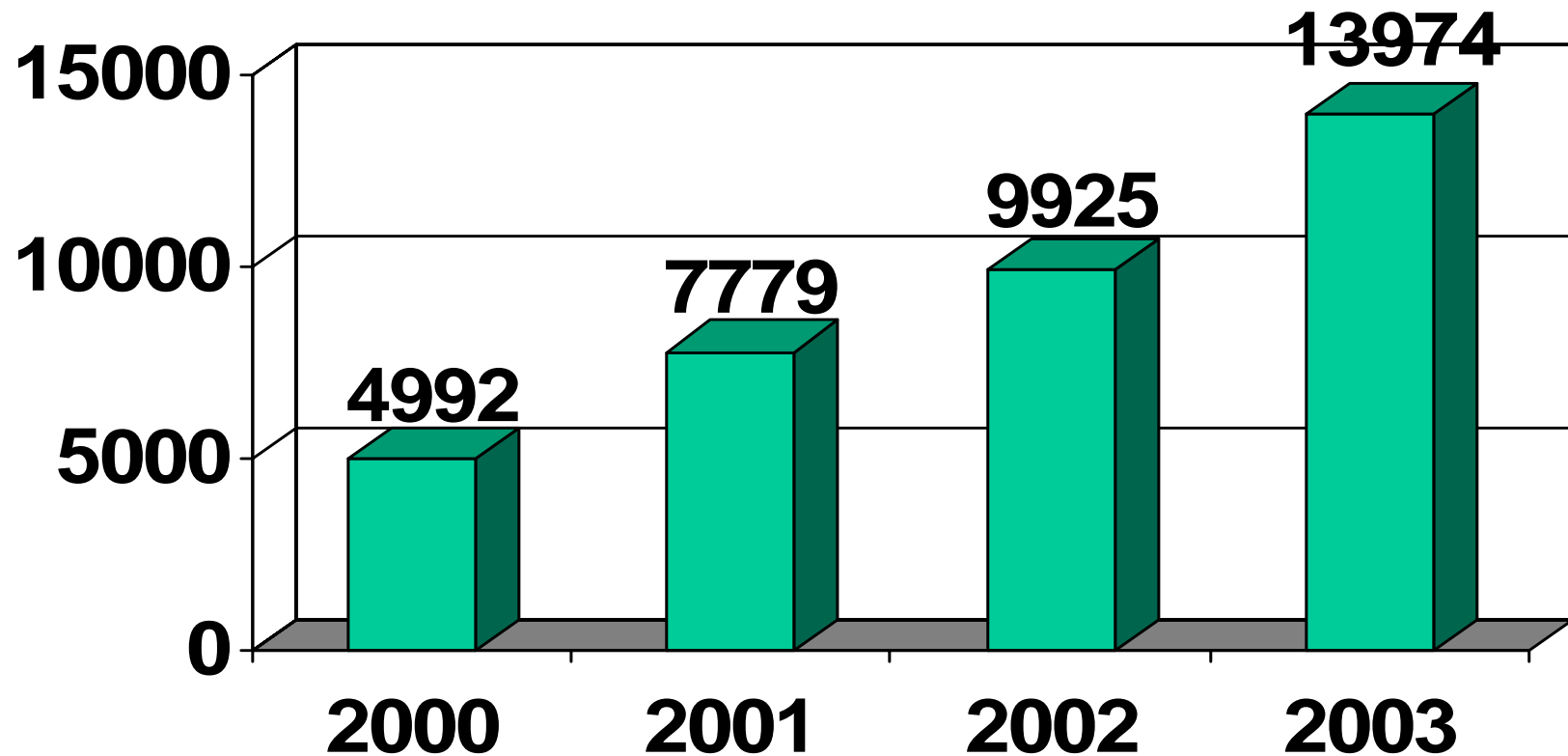
Cost: \$30,000 to \$50,000



Source: NIDDK

*Highest Increase Rate of all Pediatric Surgeries*

# Bariatric Surgery Volume for California Hospitals



**Average Cost per Surgery: \$20,000- \$50,000**

# Urban Sprawl, Physical Activity, Obesity, and Morbidity

“Those living in Sprawling counties were likely to walk less ( $p=.004$ ), weigh more ( $p<.001$ ), and have a greater prevalence of hypertension ( $p=.018$ ) than those living in compact counties.” (average six pound difference)

Ewing R et al: American Journal of Health Promotion  
18 (1) Sept/Oct 2003

# DIABETES

It Strikes  
16 Million  
Americans

Are You  
at Risk?

Computer drawing of a human insulin molecule

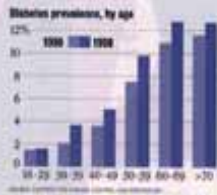
## SOCIETY

# An American Epidemic

# Diabetes

**The silent killer:** Scientific research shows a 'persistent explosion' of cases—especially among those in their prime  
BY JERRY ADLER AND CLAUDIA KALB

SOMETHING TERRIBLE WAS HAPPENING TO YOLANDA BENITEZ's eyes. They were being poisoned; the fragile capillaries of the retina attacked from within and were leaking blood. The first symptoms were red lines, appearing vertically across her field of vision; the lines multiplied and merged into a haze that shut out light entirely. "Her blood vessels inside her eye were popping," says her daughter, Jannette Roman, a Chicago college student. Benitez, who was in her late 40s when the problem began four years ago, was a cleaning woman, but she's had to stop working. After five surgeries, she has regained vision in one eye, but the other is completely useless. A few weeks ago, awakening one night in a hotel bedroom, she walked into a door, setting off a paroxysm of pain and nausea that hasn't let up yet. And what caused this catastrophe was nothing as exotic as pesticides or emerging viruses. What was poisoning Benitez was sugar.



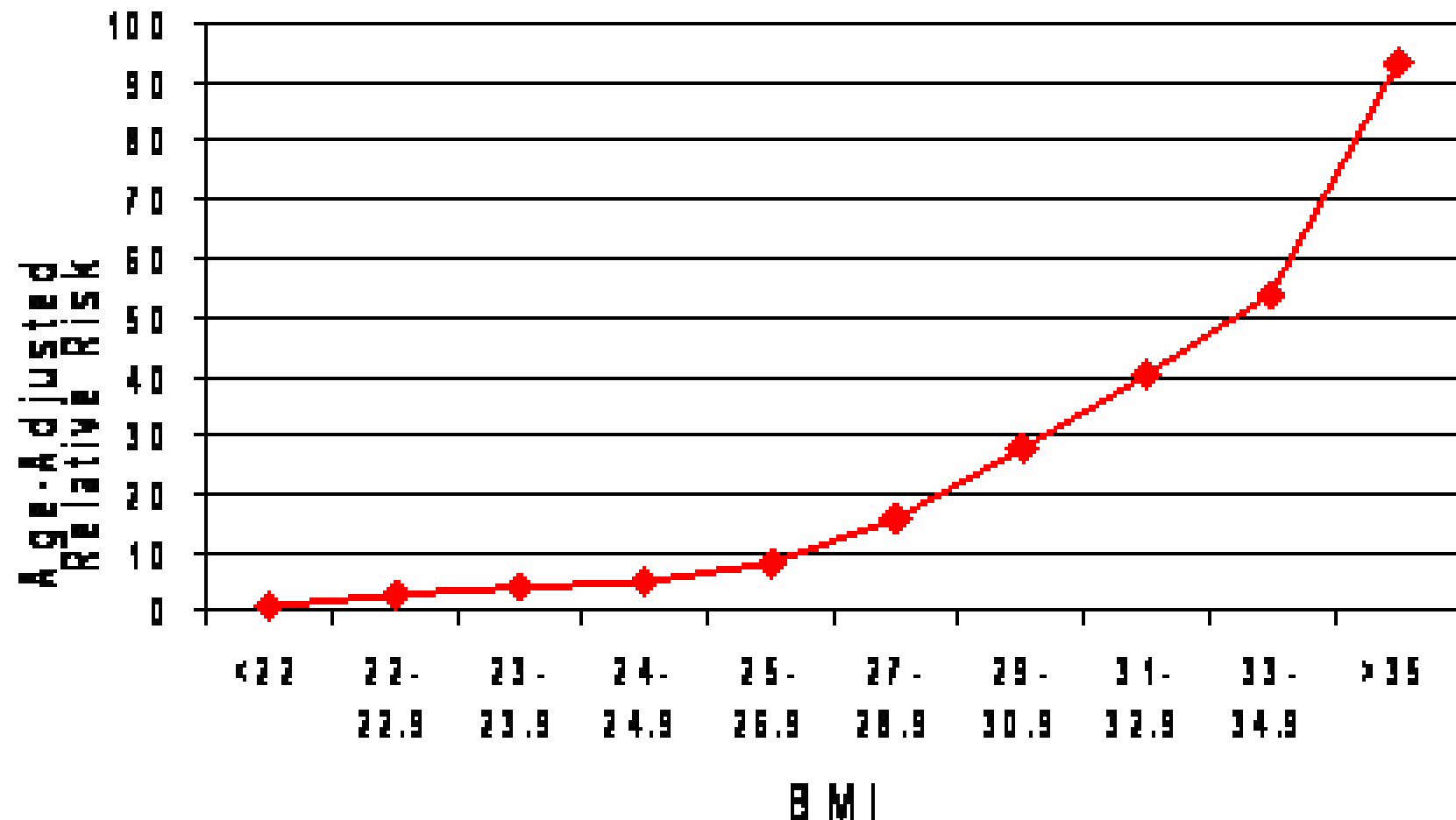
### Heredity

Genes help determine whether you'll get diabetes. In many families, multiple generations are struck. But heredity is not destiny—especially if you eat well and exercise.

**FAMILY PLANE:** Benitez (left) and Roman. Benitez's mother and two brothers died from complications of the disease.

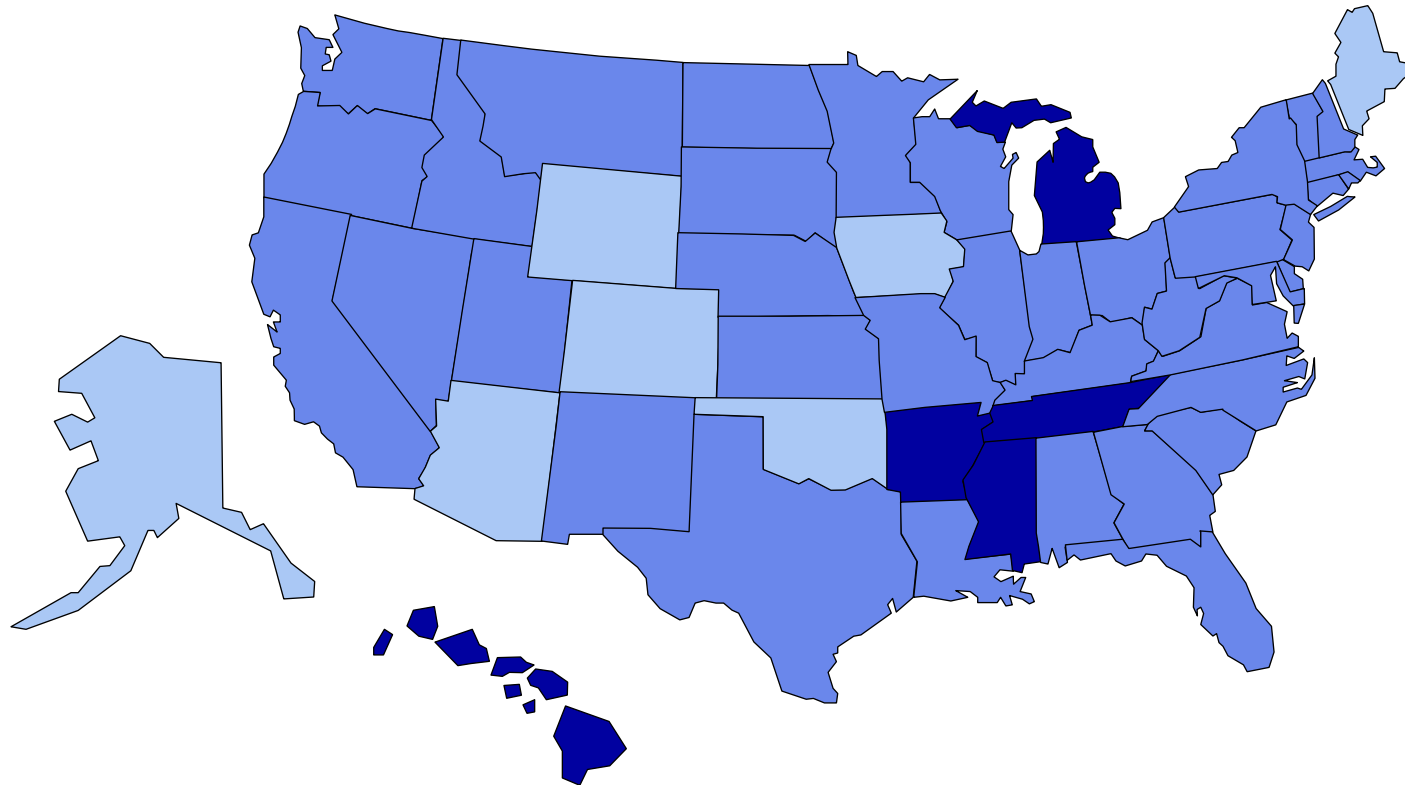


# Link Between Obesity and Type 2 Diabetes: Nurses Health Study



Colditz GA et al. *Ann Intern Med.* 1995;122:481-486.

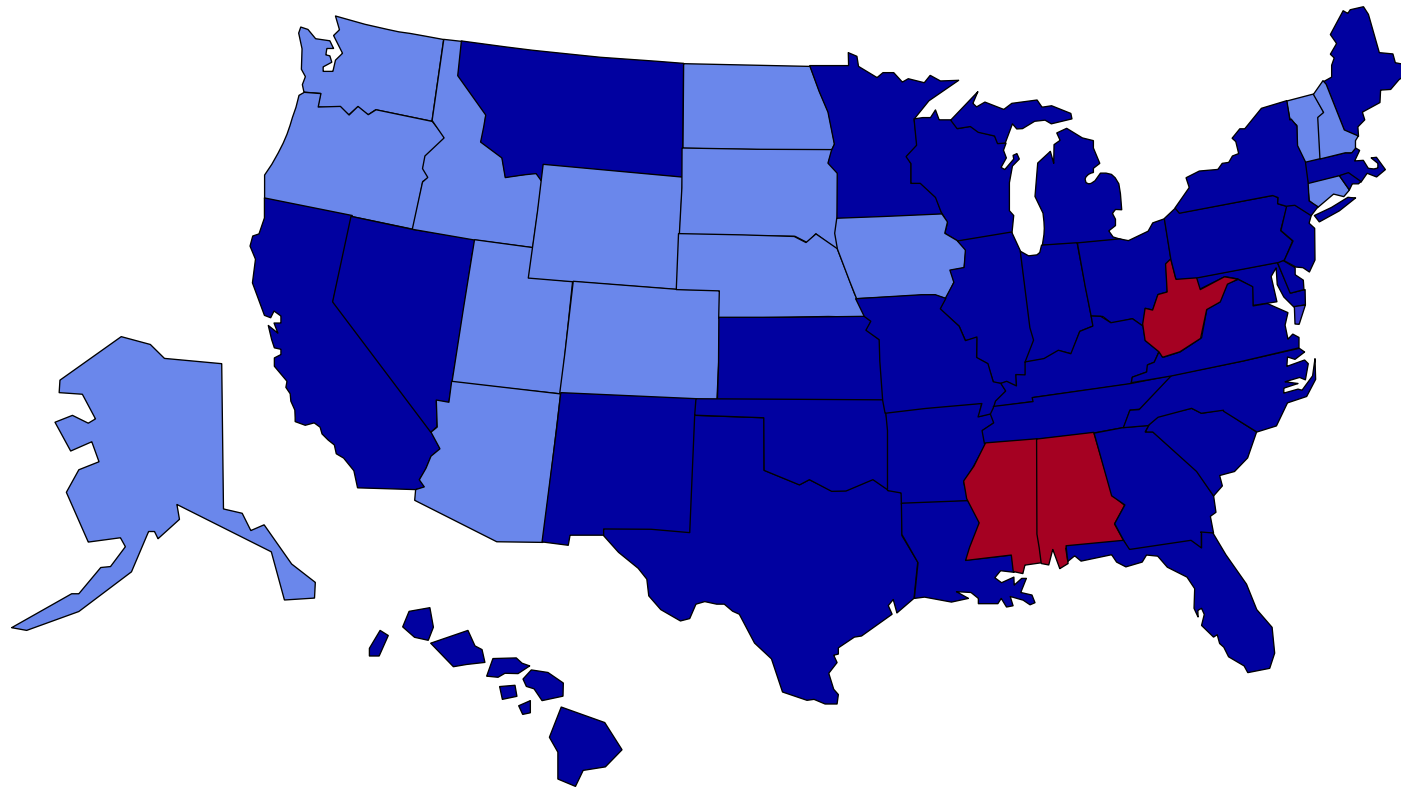
# Diabetes and Gestational Diabetes Trends Among Adults in the U.S., BRFSS 1993-94



No Data  <4%  4%-6%  6%-8%  8%-10%  >10%

Mokdad AH, Ford ES, Bowman BA, et al. Prevalence of obesity, diabetes, and other obesity-related health risk factors, 2001. JAMA 2003 Jan 1;289(1).

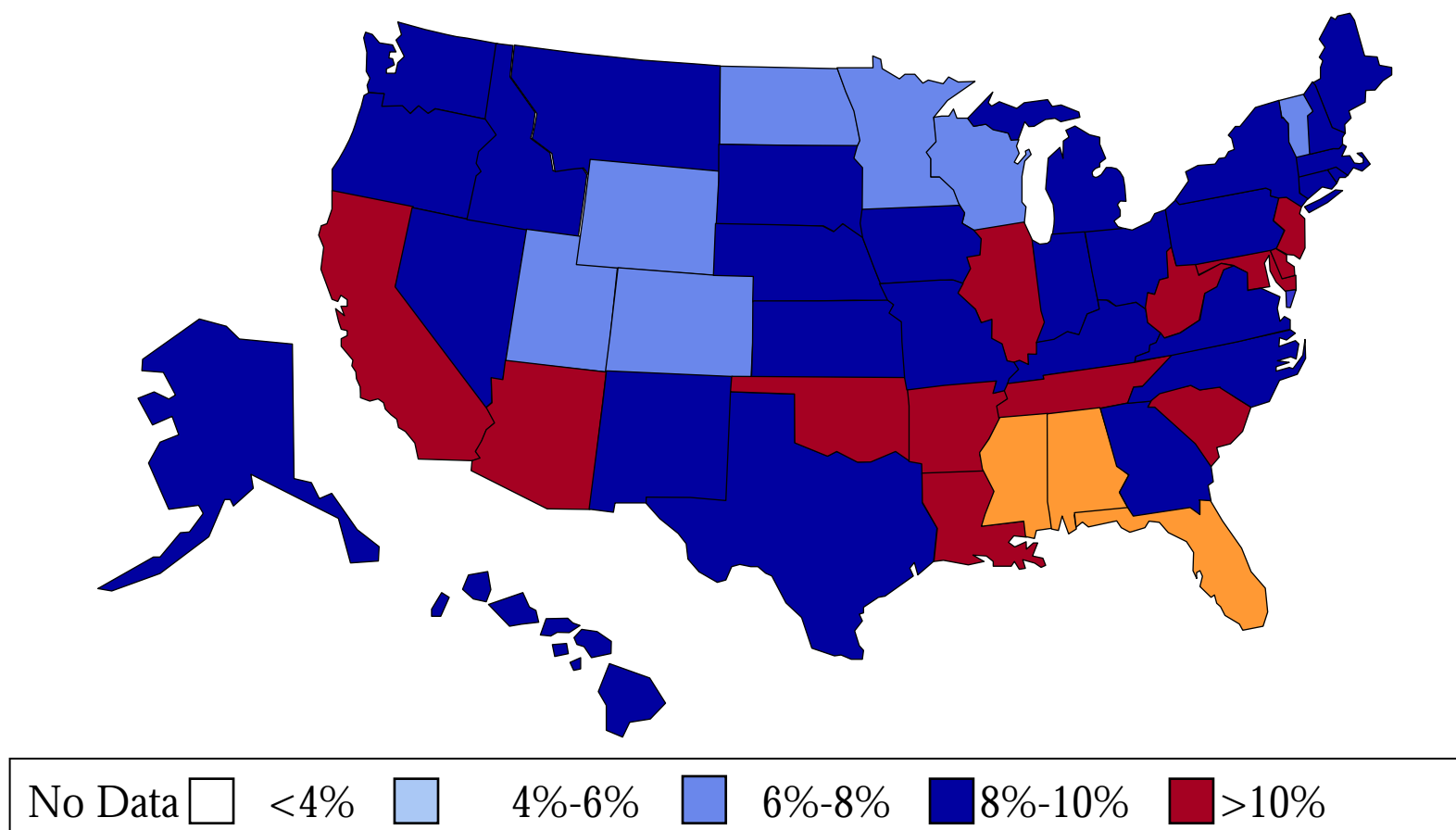
# Diabetes and Gestational Diabetes Trends Among Adults in the U.S., BRFSS 1999



No Data     

Mokdad AH, Ford ES, Bowman BA, et al. Prevalence of obesity, diabetes, and other obesity-related health risk factors, 2001. JAMA 2003 Jan 1;289(1).

# Diabetes and Gestational Diabetes Trends Among Adults in the U.S., BRFSS 2001



Mokdad AH, Ford ES, Bowman BA, et al. Prevalence of obesity, diabetes, and other obesity-related health risk factors, 2001. JAMA 2003 Jan 1;289(1).

# Diabetes Projected Risks: For Babies Born in 2000

Girls: 38% lifetime risk

- If diabetic before age 40, Lifespan shortened by 14 years (Quality of life by 19 years)

Boys: 33% lifetime risk

If diabetic before age 40, Lifespan shortened by 12 years. (Quality of life by 22 years)

V Narayan et al: JAMA 8 Oct 2003

The Atlanta Journal-Constitution / Sunday, June 15, 2003

## CDC: Diabetes to afflict 1 in 3 born in 2000

Scientist says  
kids must  
eat healthier,  
exercise more

By JANET McCONNAUGHEY  
Associated Press

**New Orleans** — One in three U.S. children born in 2000 will become diabetic unless many more people start eating less and exercising more, a scientist with the Centers for Disease Control and Prevention warned Saturday.

The odds are worse for African-American and Latino children: Nearly half of them are likely to develop the disease, said Dr. K.M. Venkat Narayan, a diabetes epidemiologist at the CDC.

"I think the fact that the diabetes epidemic has been raging has been well-known to us for several years. But looking at the risk in these terms was very shocking to us," Narayan said.

The 33 percent lifetime risk is about triple the American Diabetes Association's current estimate.

by 2050, to 29 million, an earlier CDC study by Narayan and others found.

"These estimates I am giving you now are probably quite conservative," Narayan said in an interview before the diabetes association's annual scientific meeting here.

Narayan said it would be difficult to say whether undiagnosed cases would rise at the same rate.

If they did, that could push the 2050 figure to 40 million or more.

Doctors had known for some time that Type 2 diabetes — what used to be called adult-onset diabetes because it typically showed up in middle-aged people — is on the rise, and that patients are getting younger.

Nobody else had crunched the numbers to look at current odds of getting the disease, Narayan said.

Overall, he said, 39 percent of the girls who now are healthy 2½- to 3-year-olds and 33 percent of the boys are likely to develop diabetes, he said.

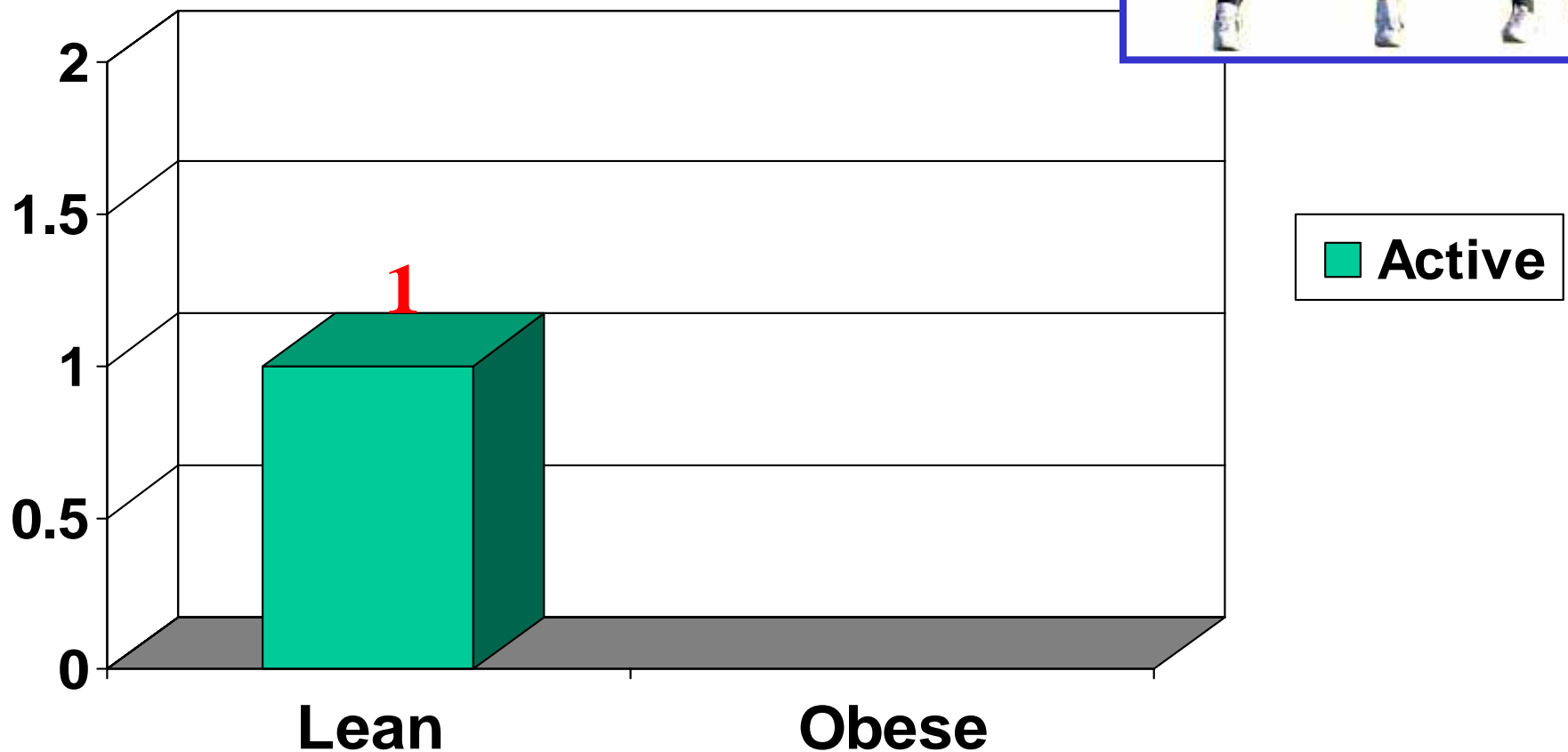
For Latino children, the odds are closer to one in two: 53 percent of the girls and 45 percent of the boys. The numbers are about 49 percent and 40 percent for African-American girls



# Nurse Study 1976-2000



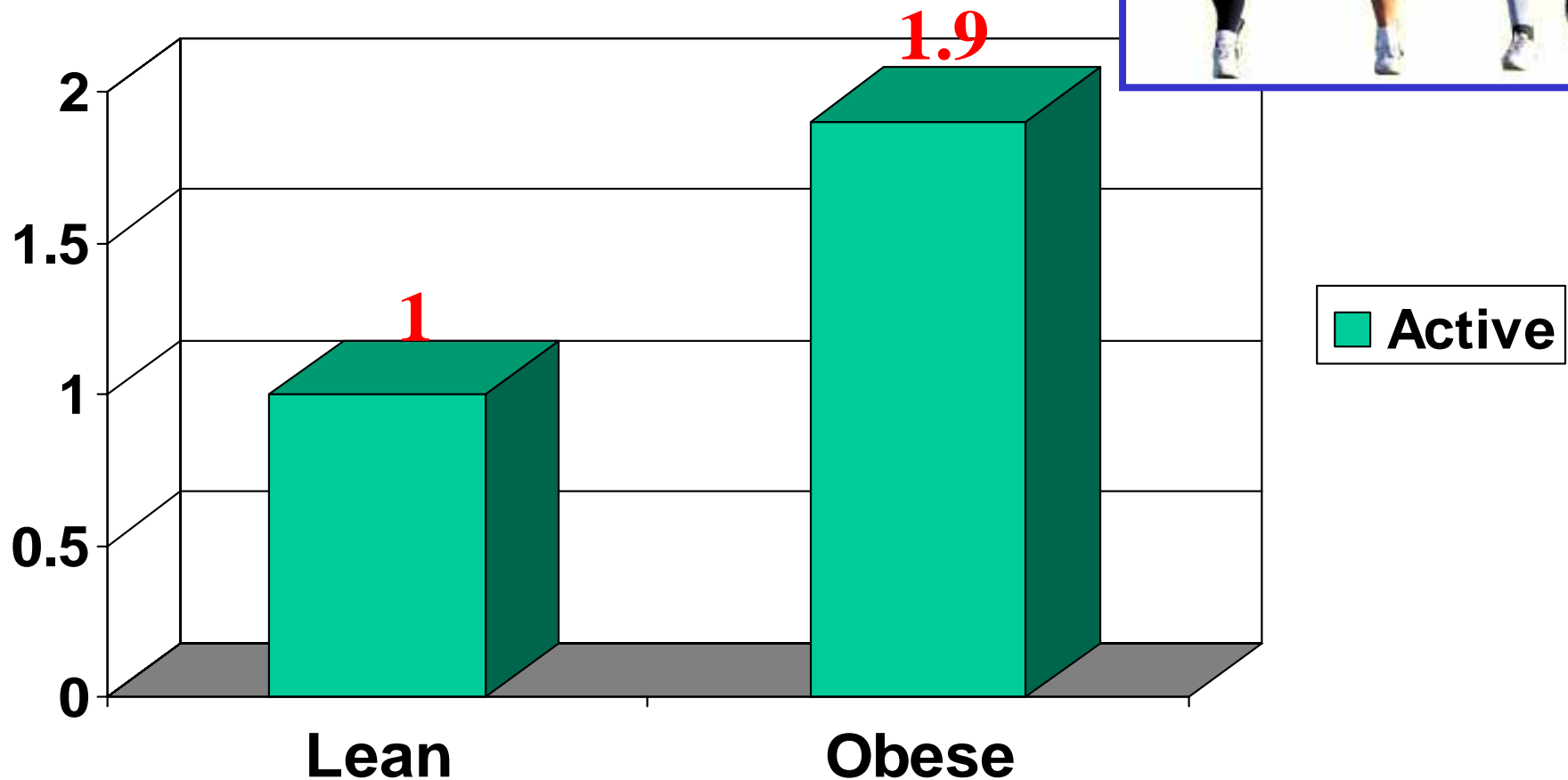
## Risk of Death



# Nurse Study 1976-2000



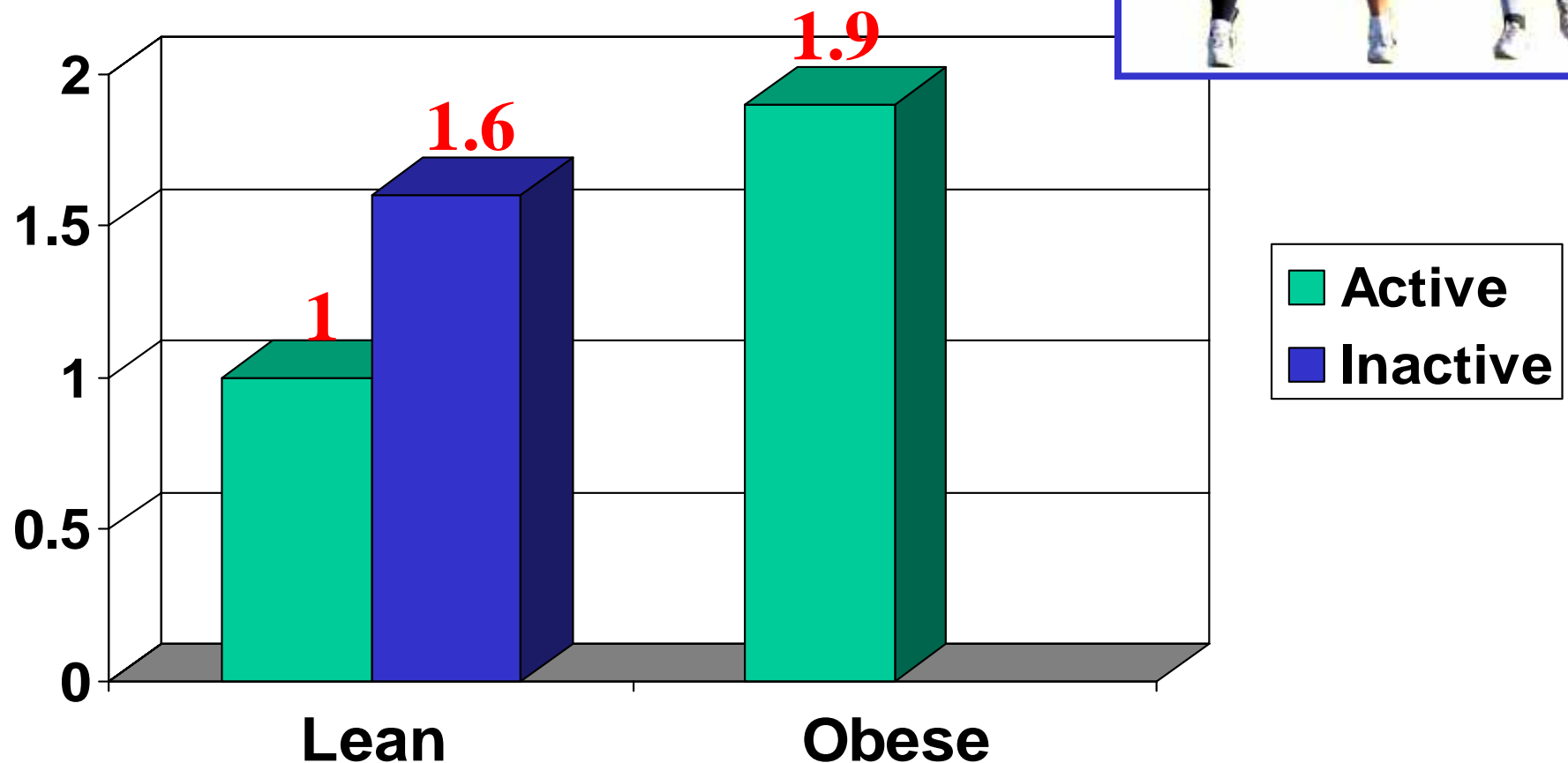
## Risk of Death



# Nurse Study 1976-2000

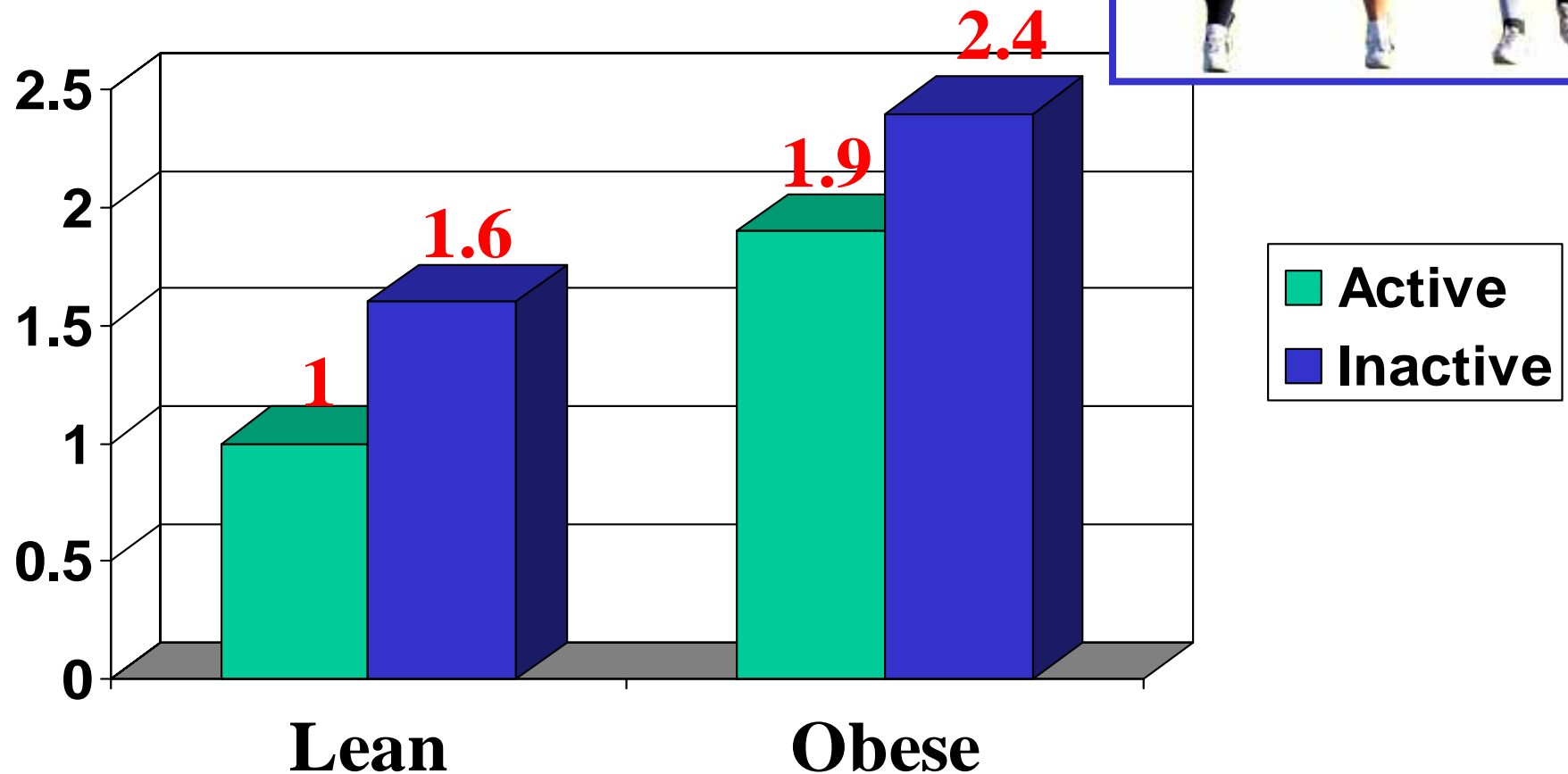


## Risk of Death



# Nurse Study 1976-2000

## Risk of Death



# Cost of Overweight, Obesity & Physical Inactivity California, 2000

	<u>Billions</u>
Health Care	\$10.172
Lost Productivity	\$11.168
<u>Workers Comp.</u>	<u>\$ .338</u>
Total	\$21.678

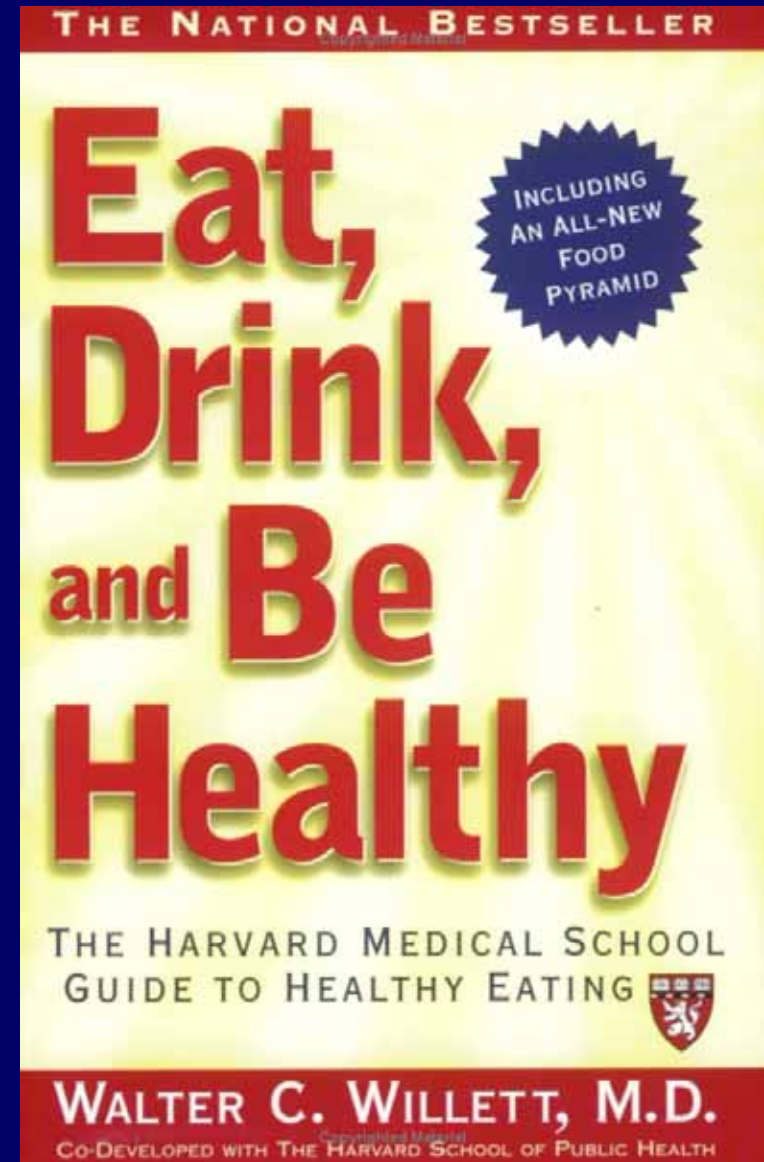
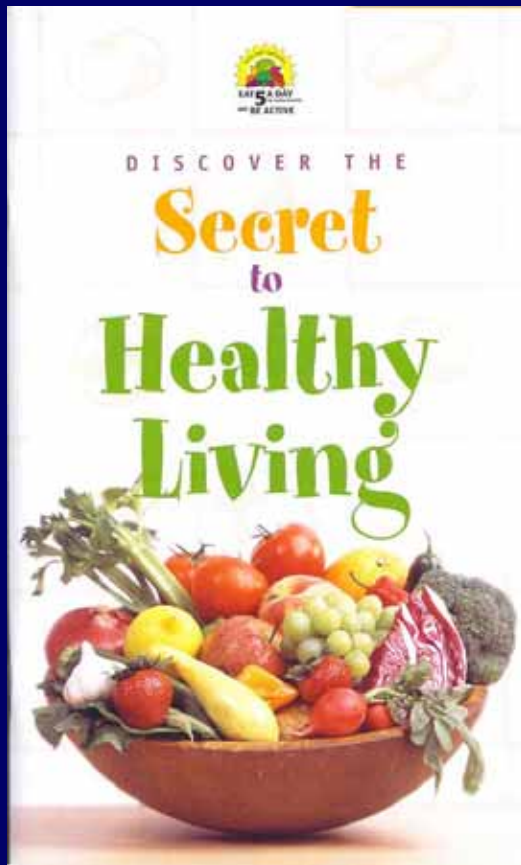
**Projected Cost for 2005:**

**\$28 BILLION**



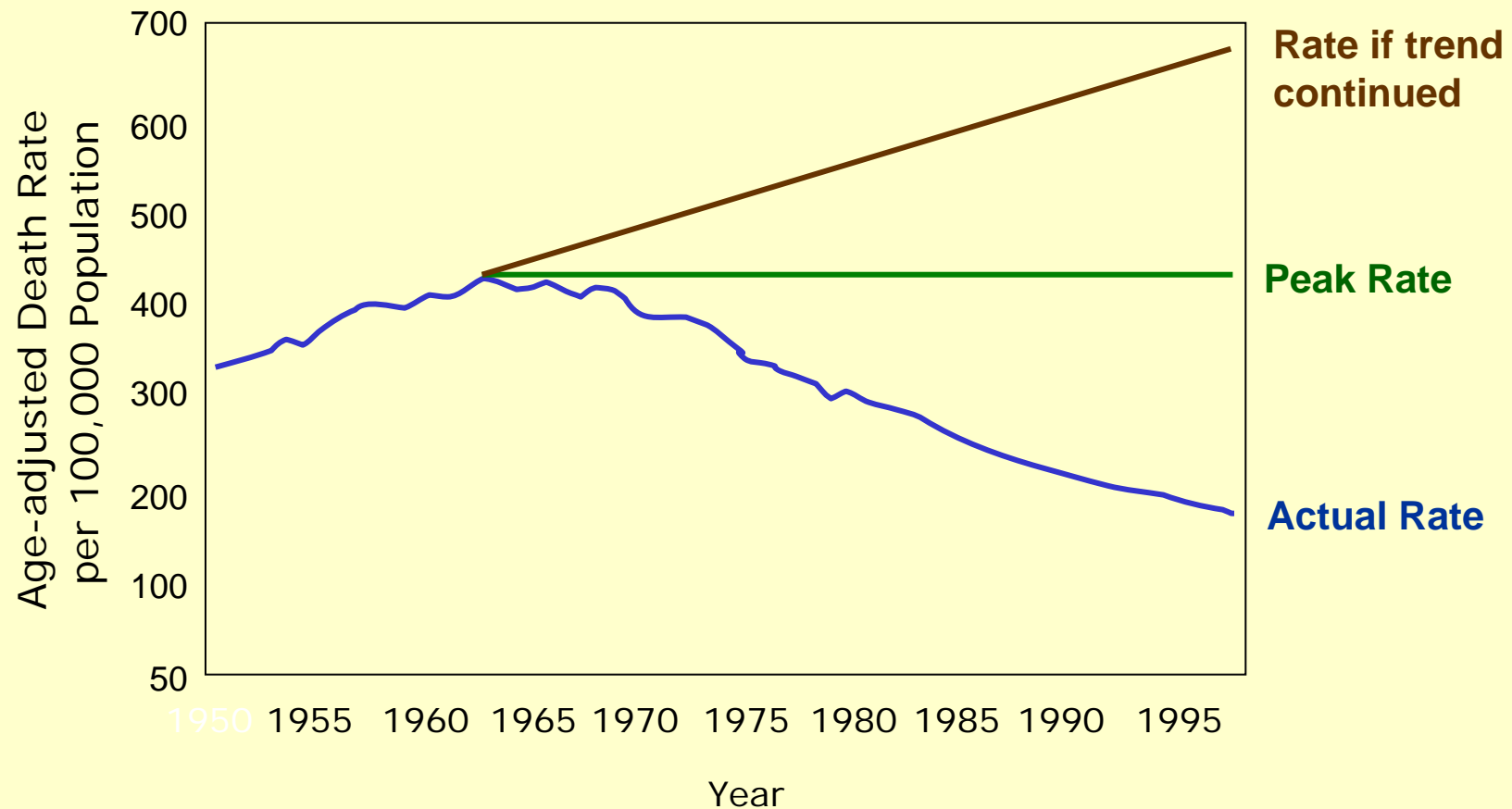
# We Can Turn This Around

- Personal Solutions



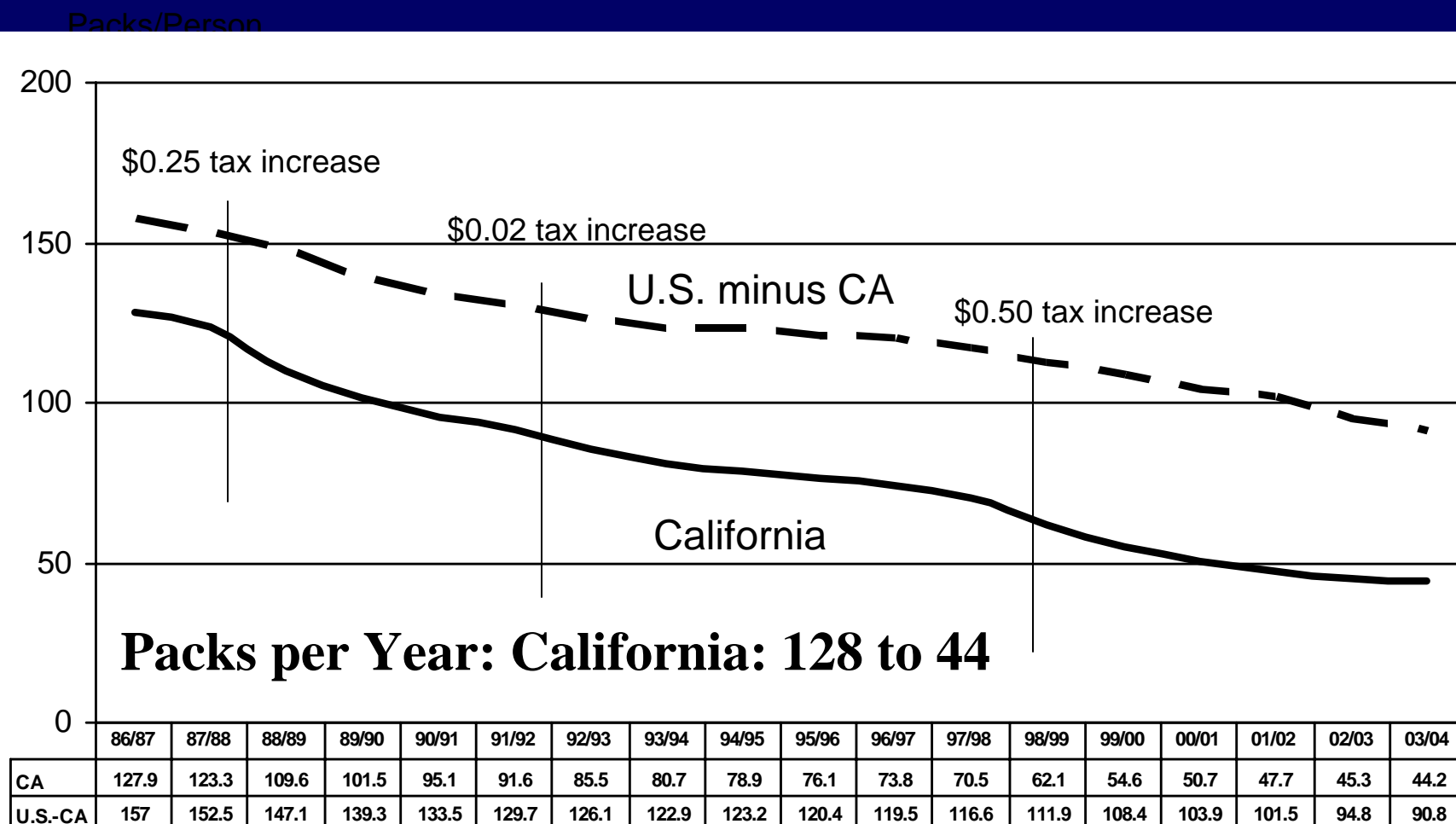
# Heart Disease Success Story

Actual and Expected Death Rates for Coronary Heart Disease, 1950–1998



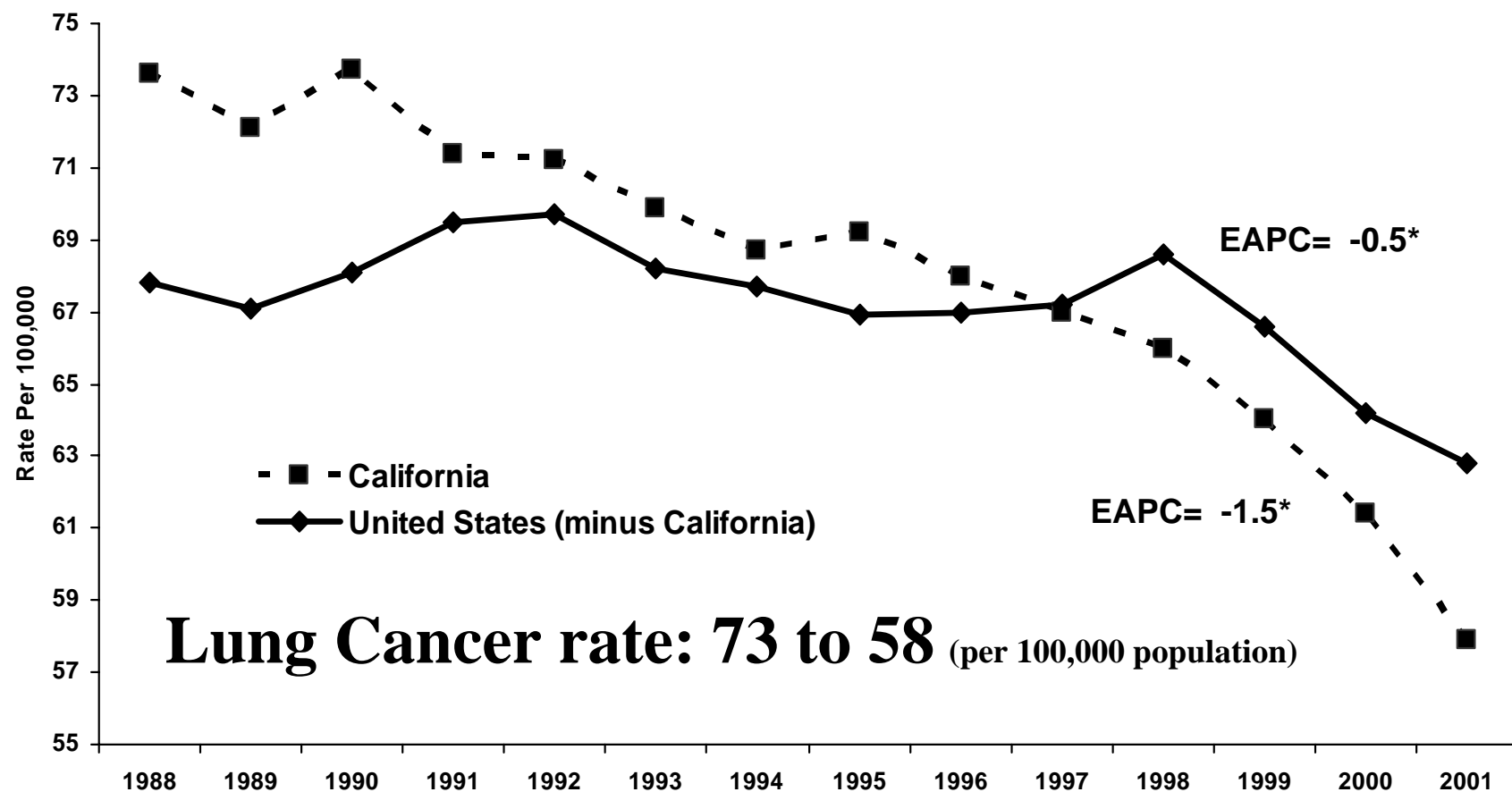
Marks JS. The burden of chronic disease and the future of public health. CDC Information Sharing Meeting. Atlanta, GA: National Center for Chronic Disease Prevention and Health Promotion; 2003.

# California vs. Rest of US: Adult per capita Cigarette Consumption 1984-2004



Source: California State Board of Equalization (packs sold) and California Department of Finance (population).  
 U.S. Census, Tax Burden on Tobacco, and United States Department of Agriculture. Note that data is by fiscal year (July 1-June 30).  
 Prepared by: California Department of Health Services, Tobacco Control Section, February 2005.

# Lung and Bronchus Cancer Incidence Rates: 1988-2001 (age adjusted)

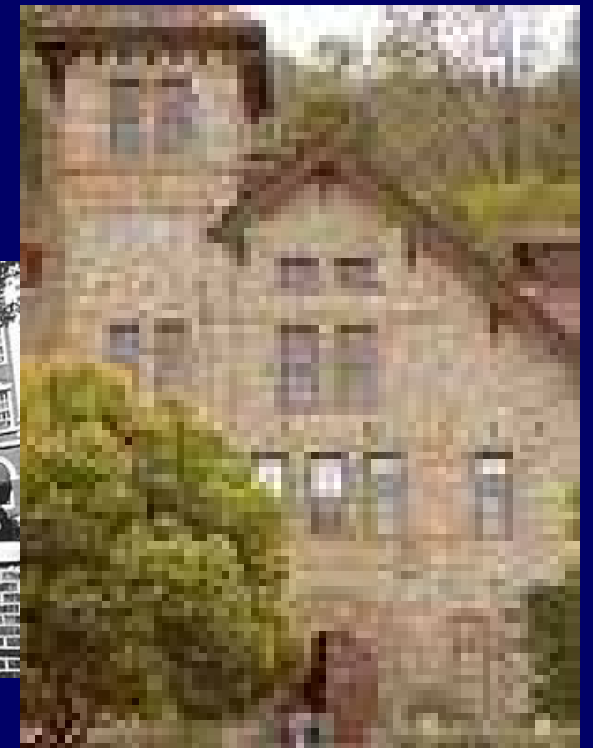


<sup>1</sup> Rates are per 100,000 and age-adjusted to the 2000 U.S. standard (19 age groups); Percent changes were calculated using 2 years for each end point; EAPCs were calculated using weighted least squares method.

\* The EAPC is significantly different from zero ( $p < 0.05$ ).

Source: Cancer Surveillance Section. Prepared by: California Department of Health Services, Tobacco Control Section, 2004.

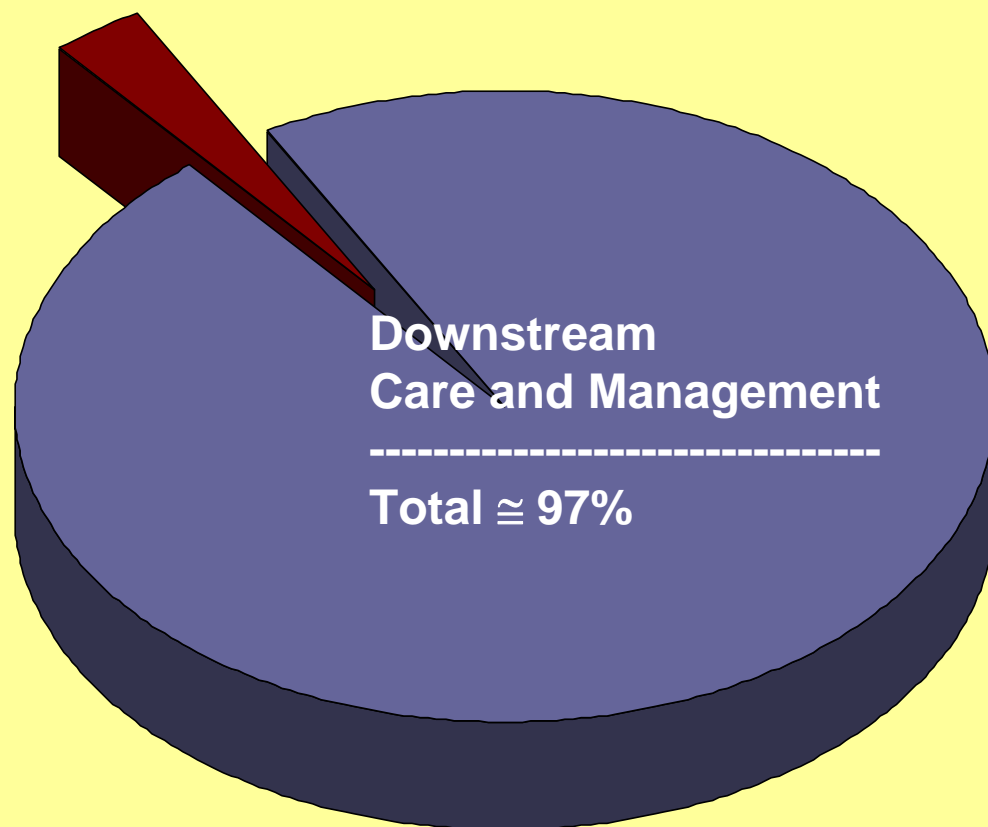
# Culinary Institute of America





# Microsized Investment in Public Health, Protection and Prevention

Upstream  
Prevention --  
Total < 3%



# **Institute of Medicine**

*The purpose of public health is  
to fulfill society's interest in  
assuring the conditions in which  
people can be healthy*

# Economy...

Economic Growth, strength in  
agriculture, jobs, industry

# Environment...

Healthy air, water, food & healthy places  
to live, work, play

# Equity...

Access to all aspects of *community*  
is fair for all residents



**"First of all, we in California this year are introducing legislation that would ban all the sale of junk food in the schools"**

**-Gov. Arnold Schwarzenegger  
March 6, 2005**

# Causally Link to Obesity

- Sweetened Beverages
  - Americans over age 2: 16% of their total energy intake
  - For adolescents: 50% of daily intake of fructose
- Restaurant Prepared Foods

Center for Weight and Health UCB 2005





ONE 20 oz SODA per  
day

*17 teaspoons of SUGAR*

*250 calories*

*4 hrs bicycling*

# “Satiety”

- Reduction in food consumption after food loading.
  - 64% decrease after solid food
  - 9% decrease after liquid food
- “Energy consumed as solid food is more likely to decrease appetite than energy consumed as a liquid”

# Causal Link to Obesity (2)

- Restaurant Prepared Foods:
  - from 1970s to 1990s
    - Caloric Intake Tripled
    - Food dollar expenditures Doubled
- People who eat more food prepared away from home have higher rates of obesity
  - Nutritional quality poorer: higher in fat and lower in fiber
  - Consumers are encouraged to purchase “Value Meals”

# Newest Wonder Drug

- Life span increase: 2 years
- Risk of Cardiovascular Disease: 40% less
- Rates of High Blood Pressure and Diabetes: Reduced
- Risk of breast & colon cancer: Reduced
- Mood and mental health status: Improved
- Body Mass Index (BMI): Reduced
- Health care costs: \$300-\$400 less per year
- Cost: minimal

# Benefits of Physical Activity

- Life span increase: 2 years
- Risk of Cardiovascular Disease: 40% less
- Rates of High Blood Pressure and Diabetes: Reduced
- Risk of breast & colon cancer: Reduced
- Mood and mental health status: Improved
- Body Mass Index (BMI): Reduced
- Health care costs: \$300-\$400 less per year
- Cost: minimal

Surgeon General's Report, 1996



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THIS DOCUMENT CONTAINS VOID PANTOGRAPH, MICROPRINTED SIGN. LINE, REVERSE RX, SECURITY BACKPRINT  
THERMOCHROMATIC INK FEATURE, NUMBERING, PRINTED ON SAFETY PAPER

Name Richard Jackson, MD MPH

Address \_\_\_\_\_

Date

10/17/04

Arise one hour earlier than usual.  
Follow with 1/2 hour sweaty  
exercise, with additional 10 min  
stretching and calisthenics.  
Enjoy day. Repeat 4-6 d/week

- ☐ 1-24  
☐ 25-49  
☐ 50-74  
☐ 75-100  
☐ 101-150  
☐ 151 and over

Units

Refill NR 1 2 3 4 5 unlimited

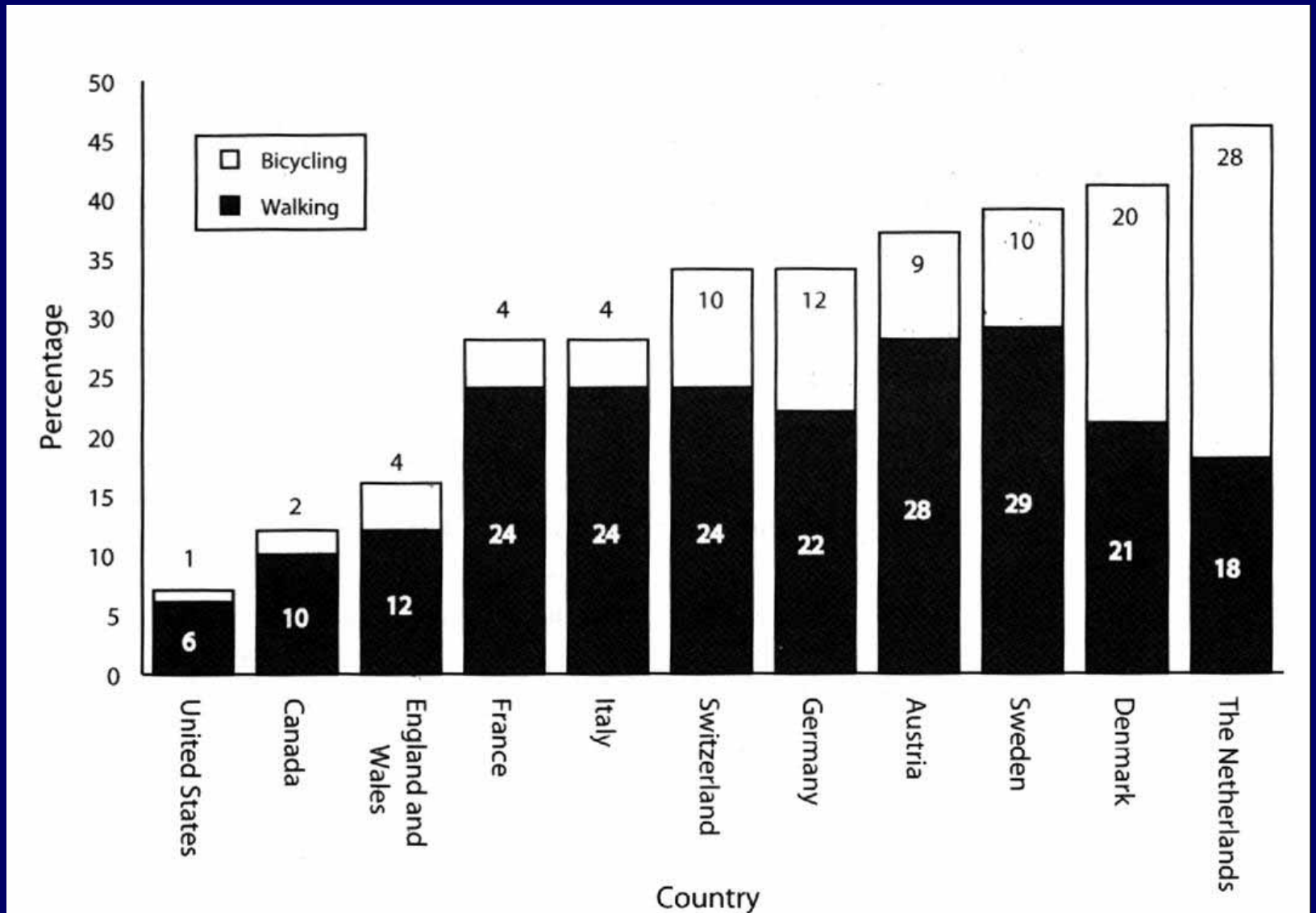
Void after \_\_\_\_\_

☐ Do Not Substitute-Dispense As Written

S. McCurdy, MD, MPH  
Signature

Prescription is void if more than one (1) controlled substance prescription is written per blank.

# Percentage of Trips in Urban Areas Made by Walking and Bicycling: North America and Europe 1995





# 10,000 Steps a Day

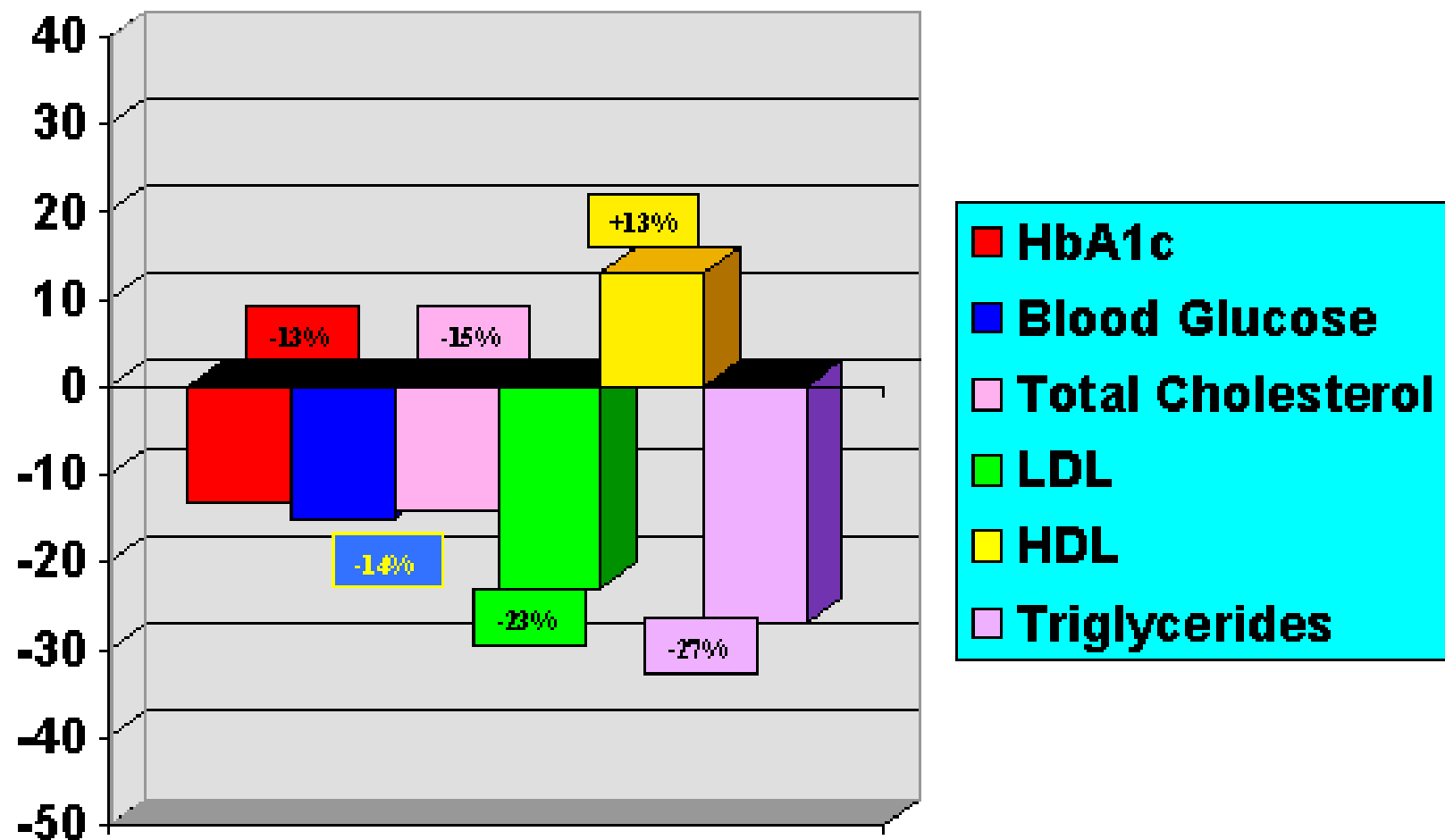
Originated from Japanese: "*Manpo-Kei*"



# 10,000 steps

- 3234 people with IGT (Pre-Diabetes)
- walked or exercised five times a week for 30 minutes
- lost 5% to 7% of their body weight
- reduced their risk of diabetes by 58%

# Benefits of 10,000 steps



Diabetes Prevention Program Study, 2003



# Places of the Heart



# Envisioning Change





# Envisioning Change





# Envisioning Change



# Community Policing



# Exercise



Improved  
opportunities for  
walking and  
jogging

Boyle Heights, California  
East Los Angeles



[www.preventioninstitute.org](http://www.preventioninstitute.org)

ENV1001\_BE\_11 Profiles\_0704



# Improved opportunities for walking and jogging

## *Boyle Heights, California*

- ◆ Small, densely populated, predominantly Latino urban community
- ◆ Evergreen Cemetery is one of the area's main green spaces
- ◆ Before the Walking trail: High rates of Traffic-related deaths and hospitalizations



- Only **13%** of children walk or bike to school as compared to **66%** in 1974.  
(CDC, 2000)
- About **85%** of children are driven to school in private vehicles— even when the students live less than two miles away.
- **50%** of children who live less than a mile away are driven to school regularly.  
(CDC, 2002)





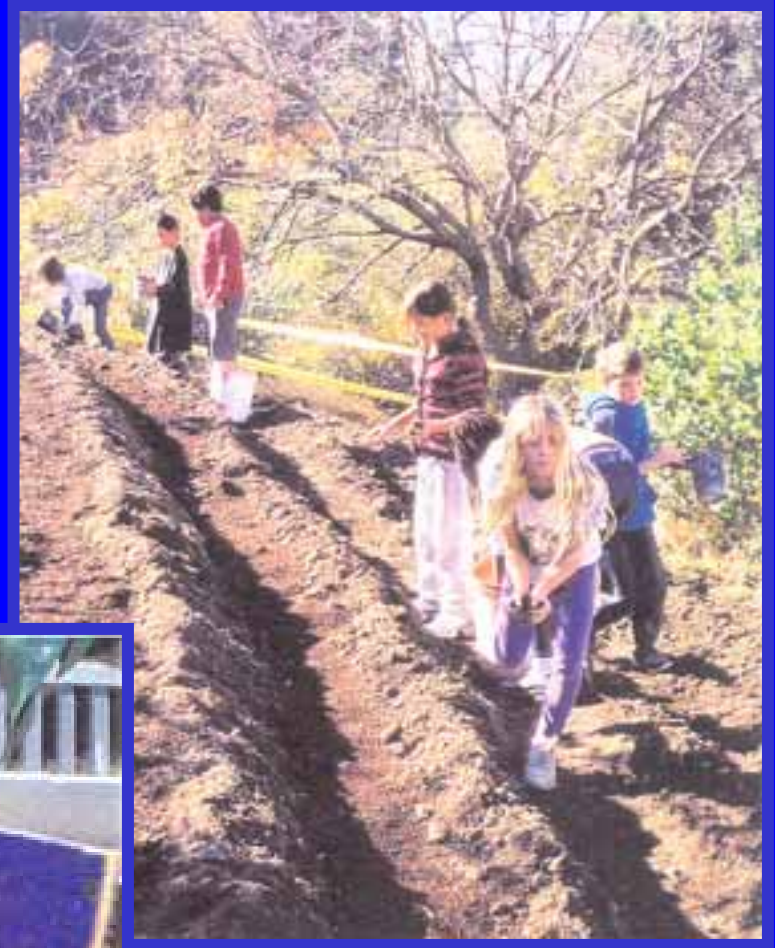
# “Walking” School Bus





# School Gardens

Exercise, Learning,  
Cooperation, Fun, and



**It Tastes good**

# Importance of Food Markets

- In town stores: especially “mom and pop”
- Farmers’ Markets
- Transportation Access (including safe adequately-lit sidewalks)



- CDC now mandates its new Buildings have attractive, daylit stairways at main entrance.
- Elevators require more effort to get to than stairs



American Journal of  
**PUBLIC  
HEALTH**

September 2003

Walking, Bicycling, and Urban Landscapes | Urban Form, Health, and the  
Law's Limits | Smart Growth | Success in Promoting Safe Walking and Biking  
to School | A Research Agenda for Community Design, Land Use, and Health |  
**BUILT ENVIRONMENT AND HEALTH** | Does Urban Sprawl Increase Motor Vehicle  
Occupant and Pedestrian Deaths? | Linking Housing and Health in Europe



**AJPH**

**Built Environment  
and Health**

**September, 2003**



# CDC Healthy Places Website

[www.cdc.gov/healthyplaces](http://www.cdc.gov/healthyplaces)

- Journal of Health Promotion: Full September Issue
- Increased Research Support From NIH
- Active University Planning/Health Collaborations

- Richard Joseph Jackson,  
MD, MPH

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